AGRICULTURAL OUTLOOK

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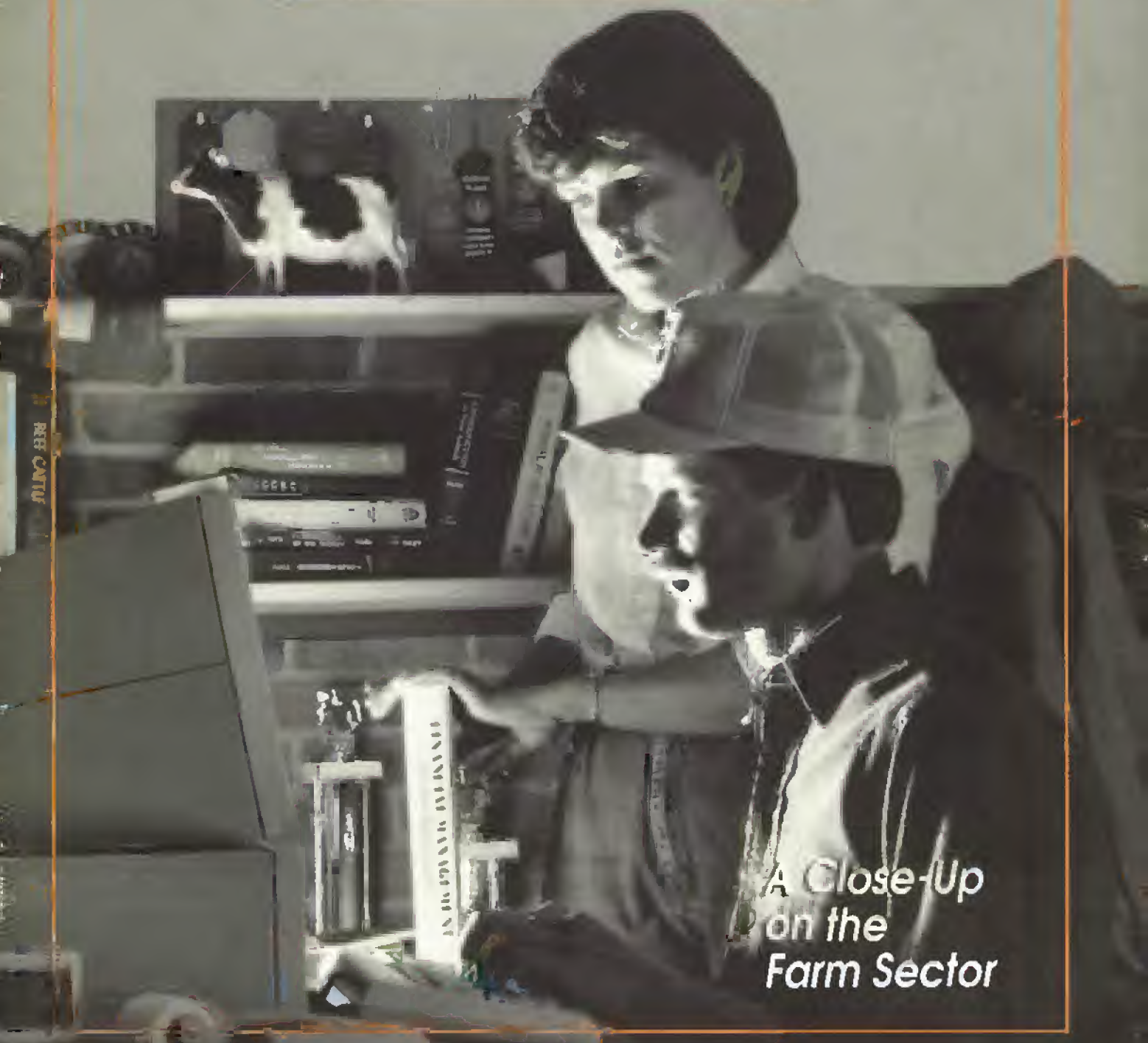

A Close-Up on the Farm Sector

October 1991/AO-179

AGRICULTURAL OUTLOOK

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Special Articles

Statistical Indicators

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News of Adverse Weather, Farm Income, U.S. Exports, U.S. Farm Operators, and Lower Fat Foods

Contrasting developments on the U.S. agricultural scene are becoming evident as the economy enters the last quarter of 1991. This month's *Agricultural Outlook* highlights a number of contrasts emerging in crop and livestock production, farm income, in the composition of U.S. agricultural exports, and among farms and farm operators.

Higher production of beef, pork, and poultry is expected this fall, continuing through 1992. Larger supplies of all meats are exerting downward pressure on retail prices. By contrast, a decline in milk supplies since June and demand for pipeline cheese stocks have temporarily eliminated the dairy surplus.

In the crops sector, differences show up in the supply situation for feed grains and for soybeans. Feed grain supplies are at their lowest level since 1983/84—the year of the Payment In Kind (PIK) program as well as a year affected by drought. But high carryin stocks of soybeans will likely keep supplies at a level just below 1990, at 2.1 billion bushels, and above the low levels of 1988 and 1989.

Adverse weather, however, is affecting both feed grains and soybeans, according to USDA's September 1 crop survey. The corn crop will drop to 7.3 billion bushels and the soybean crop to 1.8 billion—a decline of about 5.5 percent for soybeans and 8 percent for corn.

Dry conditions in the Corn Belt contrast with the Southern U.S, which is harvesting record or near-record peanut and cotton crops this year. Record sugar output is expected, and although U.S. sugar use continues to rise, the pace of consumption is not expected to keep up with the increase in output.

This month's *AO* turns the commodity spotlight on U.S. cotton and on Hawaiian sugar. The cotton outlook exhibits strong domestic and foreign use as cotton continues to make a comeback with consumers. U.S. cotton exports, while strong, are forecast to decline somewhat in 1991/92. But cotton producers are getting help from 1990 farm legislation provisions aimed at keeping U.S. cotton competitive.

As the U.S. cotton industry thrives, Hawaii's sugar producers and processors are pressured by low returns, company mergers and exits, and high labor and marketing costs. Once the source of nearly 40 percent of U.S. cane sugar, Hawaii produced only 26 percent in 1990. In response to the pressures, the Hawaiian sugar industry is turning to new technology to recover more sugar from the cane and add value to by-products.

The fiscal year ending September 30, 1991 saw exports of high-value products (HVP) exceed bulk exports—virtually unprecedented for U.S. agricultural exports. Except during the two world wars, bulk exports (raw grains, oilseeds, and tobacco), have rarely accounted for less than half the value of U.S. farm products since at least the mid-1800's. Long-term changes in relative prices and recent government intervention by industrial economies in world markets explain much of the shift favoring HVP's.

Although net cash and net farm income for 1991 are both forecast lower than last year's $58 billion and record $47 billion, the income gains and losses will be uneven among regions and commodities. Most crop receipts will increase, mainly due to the drought, and a small increase in cattle and calf receipts will offset slightly lower hog receipts. Broiler receipts continue to fall, while turkey receipts are forecast up, and 1991 dairy receipts will be down 12 percent.

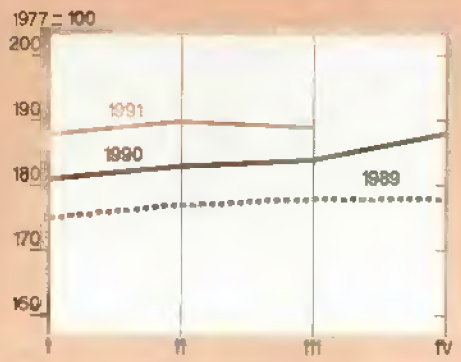
In a three-part special article, *AO* provides a look at the U.S. farm sector as a whole as well as two special groups: the mid-sized farms most often associated with the family farm image, and farms that do not rely on direct government payments. A substantial increase in off-farm work by U.S. farm operators is among the many significant changes of the last two decades.

Mid-sized farms, whose numbers fell during the 1980's, contrast considerably with the average U.S. farm in ownership, age of operator, source of income, and other characteristics. Also, based on U.S. census figures for 1987 and 1988, farms that receive no direct government payments—deficiency, disaster, and diversion payments, and the value of commodities paid in kind—differ in many ways from farms that do. For instance, farms without direct payments are generally small, and produce few program commodities.

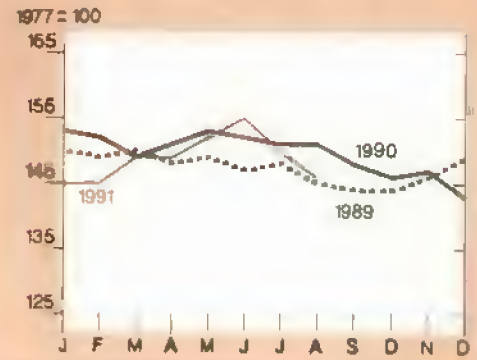
New technology and greater demand are creating opportunities to provide lower fat foods to consumers. As public awareness of the dietary link between fat intake and health increases, technological advances are helping manufacturers trim or replace the fat in foods while retaining the flavor.

Commodity Overview — Prime Indicators

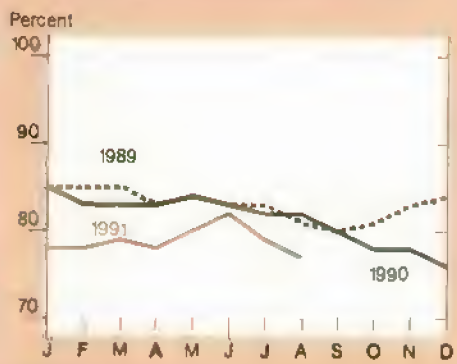
Index of prices paid by farmers



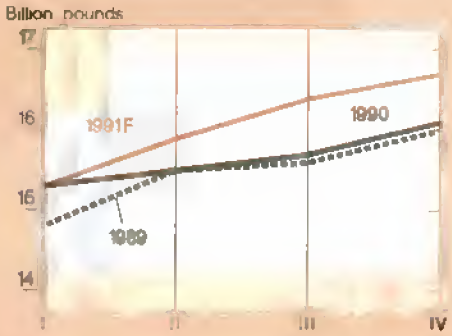
Index of prices received by farmers[1]



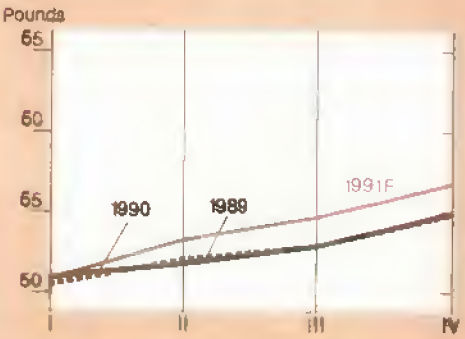
Ratio of prices received/prices paid



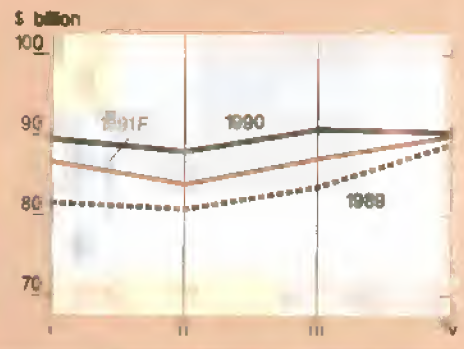
Total red meat & poultry production[2]



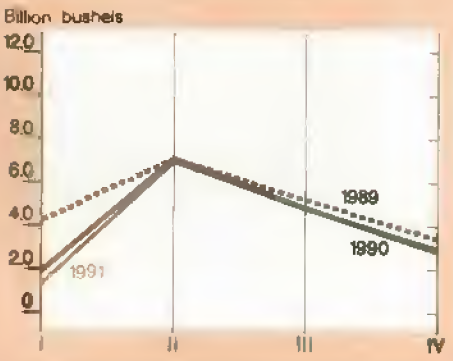
Red meat & poultry consumption, per capita[2,3]



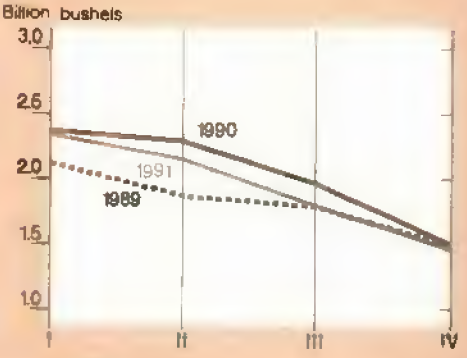
Cash receipts from livestock & products[4]



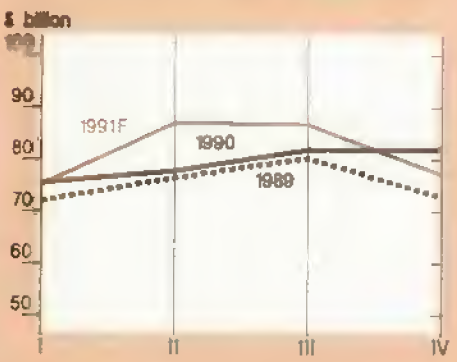
Corn beginning stocks[5]



Corn disappearance[6]

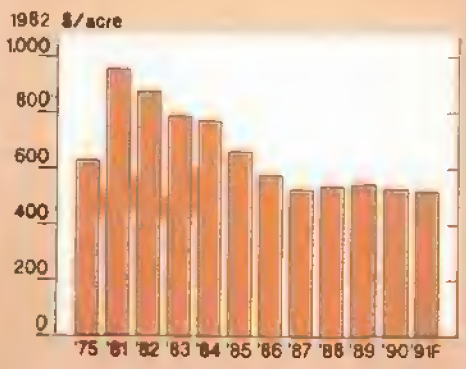


Cash receipts from crops[4]



Real cash income[6]

Average real value of farm real estate



Farm value/retail food costs

[1]For all farm products [2]Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. I=Sept.–Nov.; II=Dec.–Feb.; III=Mar.–May.; IV=June–Aug. Marketing years ending with year indicated. [3]Retail weight. [4]Seasonally adjusted annual rate. [5]Cash expenses plus net cash income equals gross cash income. F=forecast

Livestock, Dairy & Poultry Overview

Fed cattle marketings are expected to remain above a year earlier at least through October. Expanding cattle inventories will result in larger feeder cattle supplies in 1992. Beef production in 1992 is expected to be 1 percent greater than this year.

Declining hog prices and higher feed costs will likely slow the hog herd expansion. Slaughter is still increasing, and retail pork prices are expected to continue dropping through mid-1992.

Broiler production will likely expand about 4 percent in 1992, down from a 6-percent expansion this year, as producers adjust to lower broiler prices and net returns. Turkey production is expected to grow 2-4 percent in 1992, a second year of slow growth due to low returns this year and prospects of higher feed costs. (For the latest estimates of supply and use for livestock, dairy, and poultry, see tables 10-16.)

Cattle Inventory, Fed Marketings Rising

Beef production in 1992 is expected to rise 1 percent from a year earlier, about the same increase as in 1991. Dressed weights are likely to be near the 1991 record.

Expanding cattle inventories will result in larger feeder cattle supplies, and together with record meat supplies, lead to lower prices in 1992. Lower priced replacement cattle, particularly from this year's record, together with higher cost of weight gain are expected to lead to faster feedlot turnover and lower slaughter weights.

Fed cattle prices in 1992 are expected to average the same or slightly below this year's $74-$76 per cwt. Large feedlot losses in second-half 1991, increased feeder cattle supplies, and higher grain prices are likely to result in yearling feeder cattle prices $4-$6 per cwt below this year's $93-$95 average.

Cattle slaughter continues to rise seasonally, but remained below expectations during the third quarter. Adjusted for 1 less slaughter day, cattle slaughter rose nearly 2 percent in August from a year earlier, with steer and heifer slaughter up nearly 5 percent. Beef cow slaughter remains sharply below a year earlier, while dairy cow slaughter is up.

Fed cattle marketings from the seven monthly reporting states rose 3 percent in August from the low level of a year earlier, and larger fed cattle marketings are expected at least through October. Overfinished fed cattle have not been a problem so far, but weights in August and September continued at record highs. This raises concerns about how heavy these cattle can be at marketing without incurring discounts for excessive finish or becoming too heavy to be marketed through usual channels.

Fed cattle prices fell from $72.50 per cwt in late July to below $65 in mid-August. Prices strengthened in early September, but remain under pressure due to expected larger beef supplies.

Further retail price cutting, particularly in early September, helped reduce large beef supplies. But prices will have to drop even lower to avoid burdensome retail supplies as larger numbers of record-weight fed cattle are marketed through early fall. Cattle prices are expected to strengthen later in the fall as slaughter declines seasonally, but feedlot marketing weights will have to decrease first.

Stocker-feeder cattle prices remain firm compared with fed cattle prices, although the price spread has narrowed. Continued favorable forage supplies together with cyclically reduced feeder cattle inventories have helped maintain feeder cattle prices. The impact of increased feeder cattle availability this fall will be largely offset by stepped-up demand to replace cattle in feedlots, and by larger numbers of cattle remaining on forage during the winter.

Hog Slaughter Up, Pork Prices Dropping

Declining hog prices and higher corn prices are reducing the incentive to expand the hog herd. Given present feed cost estimates, hog producer returns will likely remain positive, but substantially lower than a year earlier, until early 1992.

After hitting the expected 1991 peak in late June, the seven-market barrow and gilt price held firm in July and averaged $55.23 per cwt due to lower-than-expected marketings. August slaughter was up over 8 percent from a month earlier—propelled by seasonal patterns in slaughter and past expansion in hog inventories—causing prices to drop over $7.50 per cwt by the end of the month.

Increasing pork supplies and moderately priced competing meats produced a drop in weekly wholesale pork prices in August. Average pork cut-out values reached the low $60's per cwt by the beginning of September after averaging near $70 for August.

Current storage levels of pork are low by historical standards, as wholesalers anticipate lower prices for the rest of the year. Storage holdings were drawn

Commodity Overview

down in the third quarter for most pork products, with 312 million pounds on July 1 dropping to 267 million by the start of September. The seasonal increase in ham stocks was the only exception to the drawdown.

Retail pork prices dropped 2 cents a pound in the second quarter, but picked up in the third quarter mainly due to strong July prices. However, retail price declines are expected through second-quarter 1992. Monthly farm-to-retail price spreads have widened, with farm prices declining more rapidly than retail prices. For the year, the widened spreads are expected to put the average price spread 4 to 6 percent higher than 1990's $1.25 per pound.

Broiler Expansion Slows, Prices Still Lower

Broiler production will likely expand 4 percent in 1992, down from about 6 percent this year, as producers adjust to lower broiler prices and net returns. Increased total meat supplies and continued lower red meat prices will keep the pressure on broiler prices in 1992.

Broiler prices are expected to average slightly lower in 1992 than this year, with wholesale prices averaging 47-53 cents a pound and retail prices 84-90 cents. Per capita broiler consumption is expected to increase about 2-3 pounds from this year.

Lower net returns through most of 1991 will dampen the expansion in fourth-quarter broiler production. Production is expected up about 4 percent from a year earlier, a slower rate of growth than a year ago.

Fourth-quarter net returns are expected to continue below a year ago, averaging slightly below breakeven. This would be the lowest quarterly return since fourth-quarter 1987. Higher corn and soybean meal prices have pushed estimated broiler feed costs above a year earlier.

Weaker broiler prices reflect continuing larger supplies of all meats, including pork and beef. Fourth-quarter wholesale broiler prices are expected to average 47 cents a pound, and for all of 1991, broiler prices will likely average 3-4 cents per pound below a year ago.

Retail prices for whole broilers during the fourth quarter are expected to average in the mid- to high 80's, slightly below a year ago. The 1991 average for retail prices is estimated at 87-89 cents a pound, 1-2 cents below a year ago. Per capita broiler consumption is forecast at nearly 74 pounds, approximately 4 pounds more than a year earlier.

U.S. broiler exports to traditional markets such as Japan, Hong Kong, and Mexico continue strong. However, weakness in the USSR market will likely push second-half exports 3-4 percent below last year. Exports for 1991 are expected about 2 percent below a year earlier.

Turkey Production Flat, Stocks Continue High

Turkey producers will likely remain cautious in 1992 after the extended periods of low returns and the prospects of higher feed prices and even lower returns in the coming year. Following production increases of 6 percent in 1989 and 9 percent in 1990, the industry may be seeing some resistance to continued expansion. Turkey production will likely increase 2-4 percent in 1992. This would be 2 consecutive years of slow growth, unusual in the turkey industry.

Fourth-quarter 1991 turkey production is expected to be unchanged from a year earlier. Annual production will likely be up 2 percent, the smallest annual increase since 1984. This year's slower growth reflects extended periods of losses and weak returns from late last year through April 1991.

Turkey stocks, which have set record monthly highs since the summer of 1990, totaled 568 million pounds on August 1, about 5 percent above a year earlier. Whole bird stocks, at 425 million pounds, were 12 percent above a year ago. However, other turkey stocks, while up slightly from July, were 12 percent below a year earlier, reflecting strength in the processing and export markets.

Turkey stocks will remain large unless consumption growth continues. However, achieving faster growth without further price declines is unlikely given expectations for lower retail pork and beef prices.

Fourth-quarter wholesale turkey prices, though likely to rise seasonally, will be unchanged from a year earlier, at 65-71 cents a pound. For the year, Eastern region hen prices will likely average slightly below 1990 at 62-64 cents.

Retail Egg Prices Continue Lower

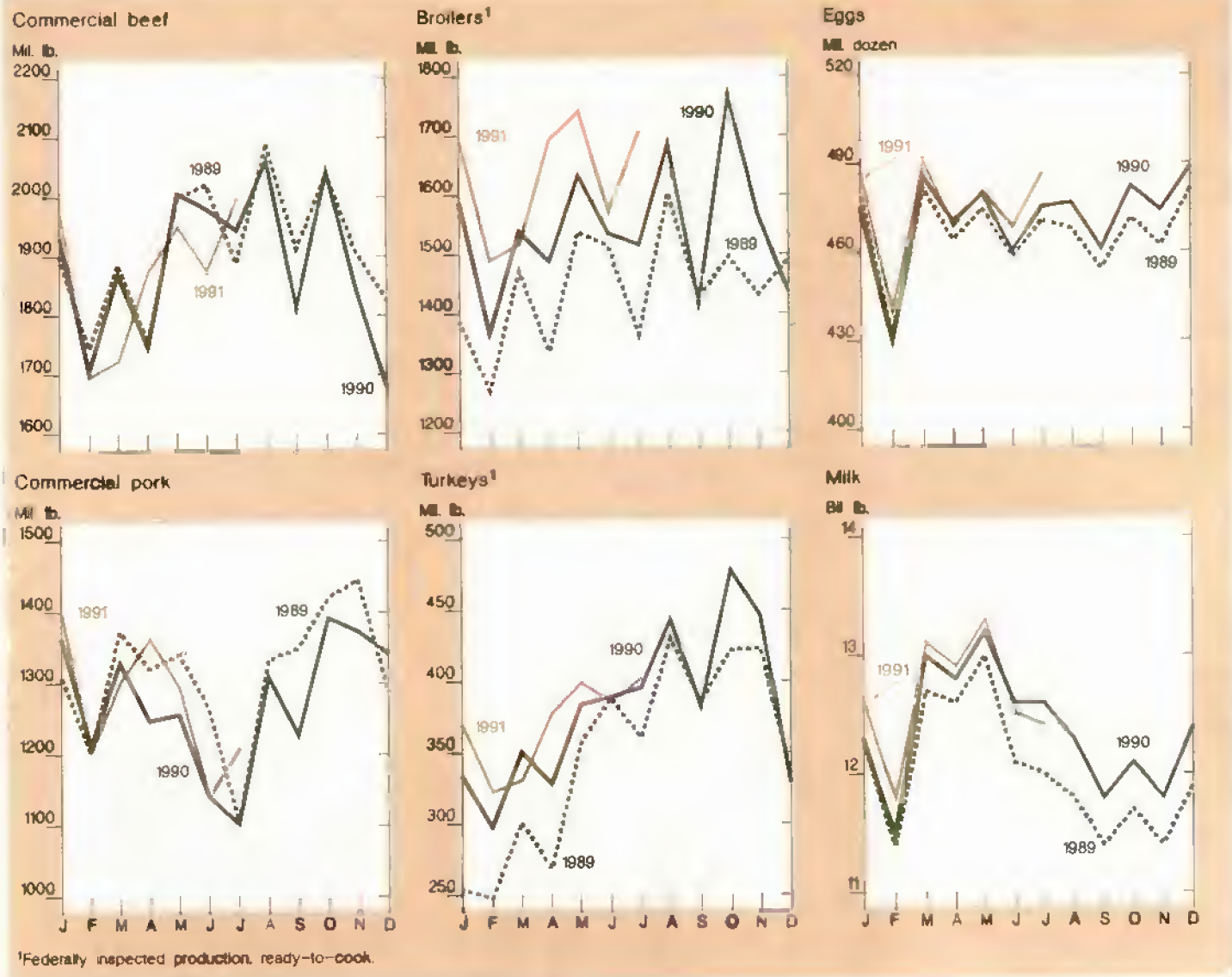
Table-egg production in 1992 will likely be the same or slightly below a year earlier. Average wholesale prices for New York Grade A large eggs are expected to drop 3-4 cents per dozen. Retail egg prices will likely average in the low 90's, a few cents below 1991.

Exports in 1992 are expected to be 3-4 percent below this year, around 130 million dozen. Lower U.S. prices will help maintain the competitive position of the U.S. in foreign markets, particularly Japan and Canada. Export Enhancement Program sales, which represented about 15 percent of 1991 egg exports, will continue to be important in 1992.

On August 1, at about 228.5 million egg layers, the table-egg flock was about 1 percent larger than a year ago, following a 2-percent increase in July. Fourth-quarter table-egg production will likely be between last year's level and 1 percent higher, with a fractionally larger annual total of around 4.9 billion dozen.

The New York average 1991 wholesale price for large eggs is expected to be 4-5 percent below last year. While seasonal price increases are expected in the fourth quarter, reflecting holiday baking and cooking, larger supplies are expected to hold prices at 79-85 cents per dozen, well below last year's 88 cents. Fourth-quarter retail prices will likely be in the low-to-mid 90's, compared with $1.01 last year.

Livestock & Product Output — Commodity Overview



[1]Federally inspected production, ready-to-cook.

Higher fourth-quarter feed costs, coupled with lower egg prices, will trim net returns during the fourth quarter about 30 percent from the 23-cent average of a year earlier. Annual net returns for 1991 will likely average 12-13 cents per dozen, compared with about 17 cents during 1990.

Milk Surplus Declining

Calendar 1992 Commodity Credit Corporation (CCC) net purchases under the milk price support program are forecast at 6.5 billion pounds (milk equivalent, milkfat basis), down more than 30 percent from 1991. A healthier economy is expected to stimulate commercial use, while 1992 milk production is forecast to be unchanged from a year earlier.

After increasing 28 percent during the first 6 months of 1991 from a year earlier, CCC purchases during July totaled 245 million pounds (milk equivalent, milkfat basis), half the amount removed from the market a year earlier. By August, sales to the CCC under the support program were insignificant. Shrinking milk supplies since June and confidence in future sales prospects—in anticipation of economic recovery during the second half of 1991—temporarily eliminated the dairy surplus.

Second-half 1991 net removals are forecast at 1.7 billion pounds (milk equivalent, milkfat basis), down almost 30 percent from a year earlier. For all of 1991, net removals are expected to be about 10.1 billion pounds.

For further information, contact: Richard Sullman and Ken Nelson, coordinators; John Ginzel, cattle; Felix Spinelli, hogs; Lee Christensen, Agnes Perez, and Larry Witucki, poultry; Jim Miller and Sara Short, dairy. All are at (202) 219-1285.

Field Crops Overview

On the domestic front, the adverse conditions affecting corn and soybean production provide a striking contrast to the cotton and peanut situation. Based on the September 1 yield survey, dry weather is likely to cut the corn crop to 7.3 billion bushels, 5.6 percent below the average for 1989 and 1990. Similarly, soybean production is projected at 1.8 billion bushels, 5.5 percent below the average of 1989 and 1990.

The domestic cotton and peanut situation presents a different picture. Based on September 1 crop conditions, 1991 domestic cotton production is estimated at 17.9 million bales, the largest crop since 1937. (For a close-up of the U.S. and world cotton outlook, see the Commodity Spotlight.) The estimated 1991 peanut crop is a record 5 billion pounds, nearly 40 percent larger than last year's drought-reduced 3.6 billion.

Despite reduced output of both corn and soybeans, the supply situation for the two crops is quite different. Feed grain supplies are at their lowest level since 1983/84. But for soybeans, high carryin stocks likely will put supplies jsut slightly below 1990's level, and above the levels of 1988 and 1989.

Another contrast emerges in the export picture. U.S. coarse grain exports are forecast at the lowest level since 1986/87, while U.S. soybean complex exports are projected to rise. (For the latest estimates of U.S. crop market conditions and outlook, see tables 17-19. The foreign outlook is in table 23.)

Feed Grain Ending Stocks Lowest Since 1975/76

Adverse weather conditions have cut U.S. feed grain production in 1991 to 213.2 million metric tons, down over 7 percent from last year. Corn accounts for the bulk of the reduction. Corn yields as of September 1 were forecast at 106.1 bushels per acre, down 1.7 bushels from the August 1 estimate and 12.4 below 1990's level. Record-low harvested area for oats and lower sorghum yields are also contributing to lower feed grain production in 1991.

Feed grain supplies, projected at 262.7 million metric tons, are at their lowest levels since 1983/84, and feed grain ending inventories are expected to fall to 35.5 million metric tons, the lowest since 1975/76. While weaker production is a major factor in reduced supplies, so is the relatively low level of beginning stocks. At just over 48 million metric tons, beginning stocks for 1991/92 are at their second-lowest level since 1984/85.

Cooler temperatures and additional rainfall during early August brought some relief from July's hot, dry conditions in the Corn Belt. However, the improvement came too late to reverse the damage that had already occurred.

As a result of low corn yields, forecast U.S. corn outturn for 1991/92 is only 7.3 billion bushels. This is down nearly 1 billion from the pre-season projection and more than 600 million bushels below last year's production. Corn prices are projected to range from $2.40 to $2.80 per bushel for 1991/92.

By September 15, the bulk of the corn crop had progressed ahead of schedule as a result of some early planting and above-normal temperatures. About 66 percent of the crop was mature, compared with 1990's 32 percent and a 5-year average of 54 percent by that date. Harvesting on a limited scale began in the third week of August in parts of Indiana and Illinois, about 10 days to 2 weeks sooner than usual. By September 15, over 20 percent of the crop in Illinois had been harvested.

In general, this year's adverse conditions have been less severe than the droughts in 1983 and 1988. Corn yields for the current year are forecast at 106.1 bushels per acre nationally, compared with 84.6 bushels during the 1988 drought. Helping support 1991 production is an additional 1.7 million acres over last year expected to be harvested for grain, partially offsetting yield losses.

The greatest production impacts have been confined primarily to the Corn Belt. Overall, yields in the Corn Belt, Lake, and Plains States are projected 2 to 29 percent below the average for 1989 and 1990, except in North Dakota, where yields will be up about 16 percent, and in Minnesota, South Dakota, and Wisconsin, which are registering no change or slight increases. Two of the worst hit states are Indiana, with yields expected down 29 percent, and Ohio, with yields down almost 25 percent.

World coarse grain trade is projected down 2 percent to 83 million tons, the lowest since 1987/88. World corn trade will be down, primarily because production rebounds in the European Community (EC) and Eastern Europe will reduce imports for these regions. While lower corn trade is pulling down the total, barley trade will reach a record 18.7 million tons.

U.S. coarse grain exports are forecast at 48.7 million tons, down 6 percent from 1990/91 and the lowest since 1986/87. Market share is down to 59 percent from 61 percent because of sluggish demand

Early Freeze Hits Portion of Midwest

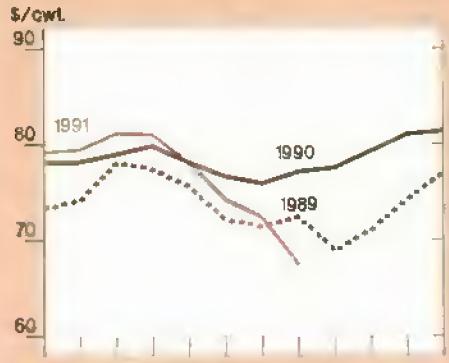
Freezing temperatures hit parts of the West and northern Midwest during the third week of September, about 10 days ahead of normal in many areas. The low temperatures primarily affected immature soybeans that had not finished filling pods.

Concern has focused on late-planted areas in Minnesota and Iowa, where soybean crop progress has been behind the average. A killing frost that hits before the soybean crop is mature may result in lower test weights and reduced oil content.

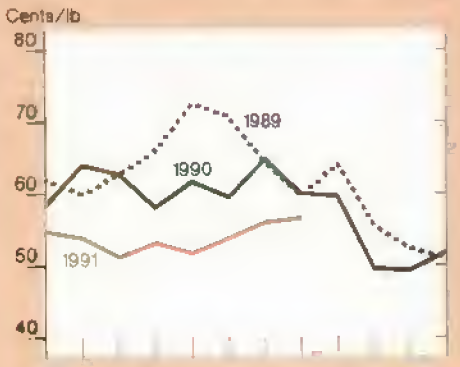
Soybean losses from frost in other areas of the Midwest are expected to be minimal because plant growth was on or ahead of schedule. Damage to corn yield will likely be minimal, because most of the crop across the Midwest was in the dent stage or beyond.

Commodity Market Prices — Commodity Overview

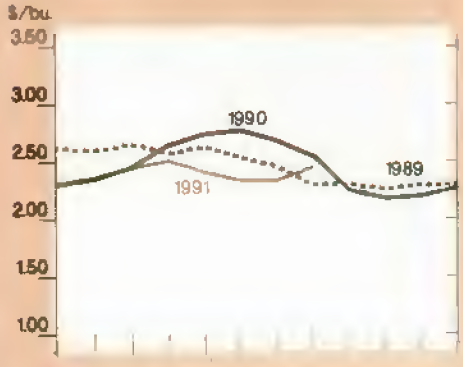
Choice steers, Nebraska



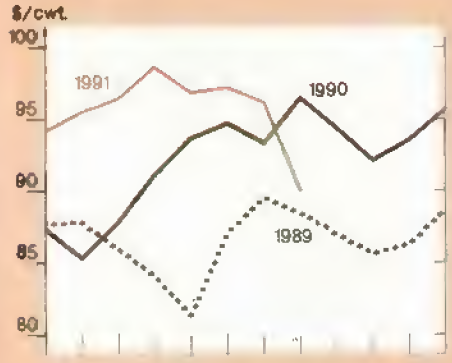
Broilers, 12-city average



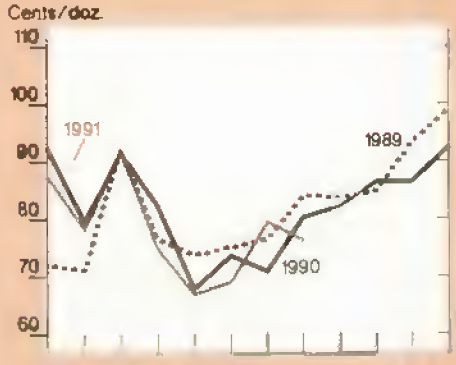
Corn, Central Illinois[1]



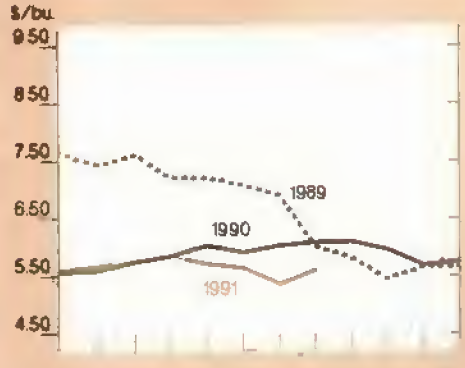
Medium steers, Oklahoma City[2]



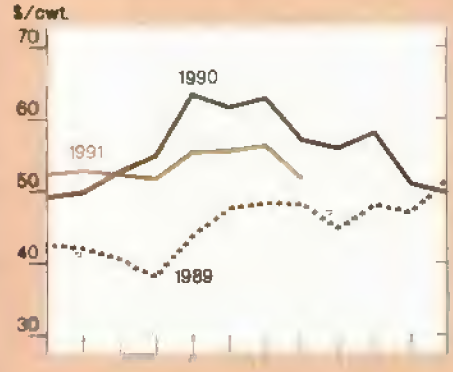
Eggs, New York[3]



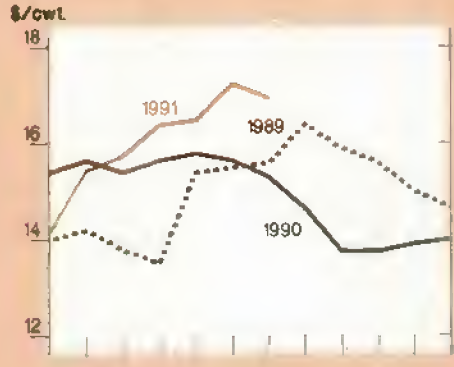
Soybeans, Central Illinois[4]



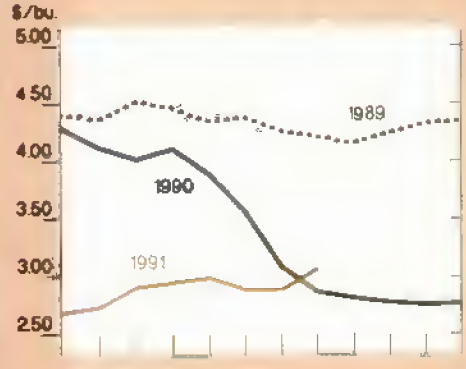
Barrows and gilts, 7 markets, Omaha



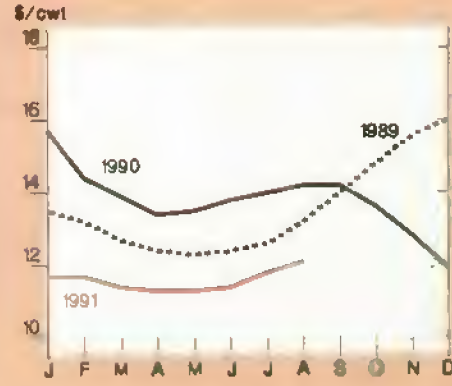
Milled rice, SW Louisiana[5]



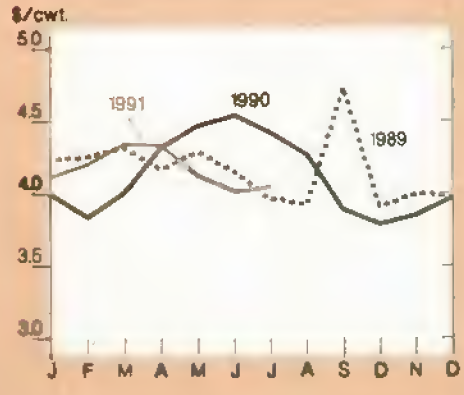
Wheat, Kansas City[6]



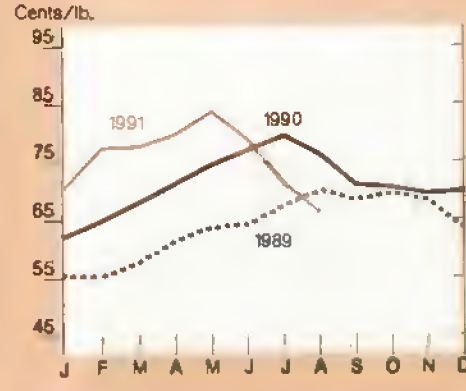
All milk



Sorghum, Kansas City



Cotton, average spot market



[1]No. 2 yellow. [2]600–700 lbs medium no. 2. [3]Grade A large [4]No. 1 yellow [5]U.S. No. 2 long-grain [6]No. 1 HRW.

Commodity Overview

for corn, tight U.S. supplies, and substitution of wheat and barley for corn in key markets.

Barley production is forecast strong in major exporting countries, including the EC and Canada, enabling them to increase barley exports sharply, particularly to the Soviet Union.

Soybean Output Lower, But Supplies Large

Like the corn crop, the domestic soybean crop has been stressed by hot, dry conditions in the Corn Belt over much of the summer. As a result, U.S. soybean yields are projected at 31 bushels per acre, down 3 bushels from last year.

Across the Corn Belt, yields are as much as 14 percent below the average for 1989 and 1990, with Illinois and Indiana showing the largest percentage declines. Yields in the Plains state of Kansas are expected down over 25 percent from the average for 1989 and 1990. But overall, soybean yields as of September 1 remain near month-earlier estimates, despite below-normal precipitation in the Corn Belt and some heat stress in mid- and late August.

Because of reduced yields, domestic soybean production is forecast about 5.5 percent below last year, at 1.8 billion bushels. But despite reduced production, 1991/92 carryin stocks of 320 million bushels will likely put supplies at slightly over 2.1 billion bushels, marginally below 1990's level.

By the week ending September 15, the bulk of the soybean crop, like the corn crop, was progressing ahead of schedule, the result of above-normal temperatures and some early planting. At that time, 41 percent of the crop was dropping leaves, compared with 21 percent in 1990. In parts of Indiana and Illinois, harvesting on a limited scale had already begun in the third week of August, well ahead of schedule.

As with corn, yield damage for soybeans from the drought has generally been less severe than during the 1983 and 1988 droughts. Yields in Corn Belt, Lake, and Plains states are generally 5 to 26 percent below their average for 1989 and 1990, except in North Dakota, where yields are expected to be more than 20 percent above the previous 2-year average. States where soybean yields are below their previous 2-year average by more than 10 percent include Illinois, Indiana, Kansas, and Nebraska.

Demand prospects for soybeans and products are expected to show slight improvement in 1991/92. Crush is forecast at a record 1.2 billion bushels based on slight growth in exports and domestic meal use. Soybean exports are forecast up 7 percent to 600 million bushels. The increased demand will likely draw stocks down to 250 million bushels. Marketing year prices are expected to average $5.25 to $6.75 a bushel.

Soybean oil remains abundant. Record high stocks are likely to surpass 2.2 billion pounds by the end of 1991/92 as export prospects remain relatively weak at 900 million pounds and domestic use is expected to show sluggish growth relative to trend. Projected larger output of sunflowerseed, cottonseed, and canola in 1991 is contributing to the weak domestic outlook for soybean oil.

Lower production and tighter stocks will likely maintain soybean prices above the basic loan rate of $5.02 a bushel. Farmers will likely be using the loan program in much the same way as in the past—as a simple nonrecourse loan.

While this season's price outlook makes the prospects for marketing loan deficiency payments unlikely, growers will still be able to use the program for cash flow,

Adverse Weather Cuts U.S. Corn and Soybean Crops

	1989/90	1990/91 (est.)	1991/92 (proj.)
	Million metric tons		
WORLD			
Wheat			
Production	538	594	551
Use	534	572	558
Exports	96	93	106
Ending stocks	121	143	136
Corn			
Production	461	478	469
Use	478	468	479
Exports	73	57	55
Ending stocks	71	82	71
Soybeans			
Production	107	103	102
Use	104	104	104
Exports	27	26	26
Ending stocks	20	19	17
UNITED STATES			
Wheat			
Production	55	75	55
Use	27	38	34
Exports	34	28	30
Ending stocks	15	24	15
Corn			
Production	191	202	185
Use	146	153	154
Exports	60	44	42
Ending stocks	34	39	28
Soybeans			
Production	52	52	49
Use	34	35	35
Exports	17	15	16
Ending stocks	7	9	7

Note: Exports of wheat and corn do not include intra-EC trade shipments. For trade data, the wheat year is July-June, and for soybeans and corn, October-September. Other data are on a U.S. marketing year basis.

to delay marketings past the harvest period when prices are typically at seasonal lows, or to move the sale of soybeans into the next calendar year for tax purposes. However, this year's 2-percent loan origination fee increases the cost to farmers of using the loan program.

U.S. 1991/92 soybean complex exports are forecast to increase. U.S. soybean exports are projected up 7 percent to 16.3 million tons, and soybean meal exports are projected to rise 6 percent to almost 5 million tons. Exports of soybean oil are forecast to rebound by 28 percent but remain weak, reaching only 408,000 tons, assuming that U.S. export assistance programs remain at least at 1990/91 levels.

The decline of 4.8 million tons in 1990/91 Brazilian soybean output is the primary reason U.S. soybean and soybean meal exports are projected to rise. Brazil is forecast to run short of soybeans for export soon and to import about 500,000 tons for domestic use during the first half of the 1991/92 U.S. marketing year.

The extent of Brazil's 1991/92 soybean production rebound depends on the availability of credit to its producers who will plant in the fall. A modest recovery of 12-13 percent is projected for the spring-harvested Brazilian soybean crop.

Wheat Prices Start Off Sluggish

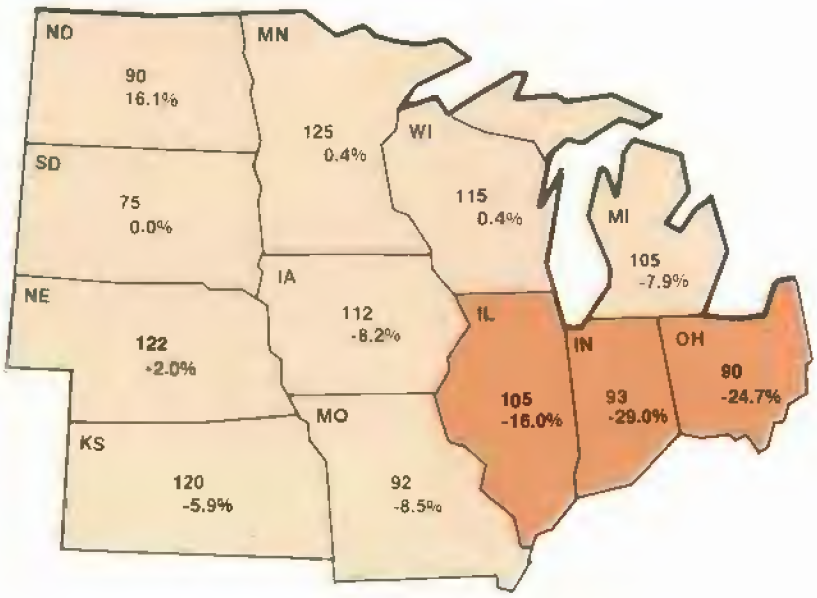
U.S. wheat production in 1991/92 is estimated at 2.0 billion bushels, down 26.5 percent from 1990's near-record. Ending stocks, at 553 million bushels, are expected to be the second lowest since 1974/75. Due to the drop in production, supply in 1991/92 will be down 12 percent from last year, at 2.9 billion bushels, despite sharply higher beginning stocks.

Several factors caused the nosedive in production. Adverse weather reduced yields to somewhat less than average, and well below last year's record. Higher acreage reduction program requirements and low wheat prices reduced plantings. And, a combination of adverse weather and incentives to graze wheat instead of harvesting for grain reduced the harvested-to-planted ratio.

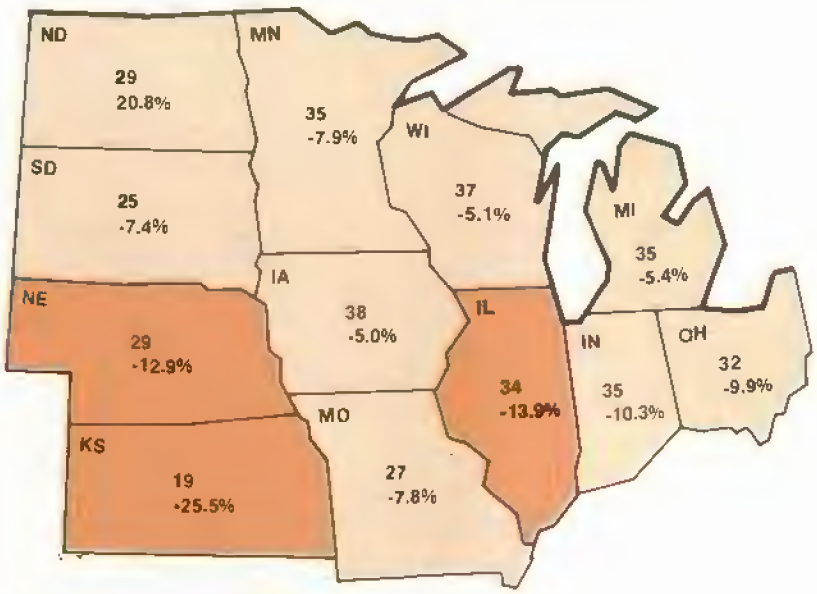
Domestic use is projected at 1.3 billion bushels in 1991/92, down 8 percent from last year. Lower residual and feed use is expected to more than offset increases in all other demand categories.

Even with reduced supplies, U.S. wheat prices received by farmers during June and July averaged just slightly over $2.50 per bushel, down about 40 cents from the same period last year. Factors causing the relatively low prices included larger beginning stocks, grain quality problems across much of the soft red winter wheat producing areas, and

Dry Weather Substantially Cut Corn Yields in Indiana, Ohio, and Illinois. . .



. . And Reduced Soybean Yields in Kansas, Illinois, and Nebraska



Top number: Bushels per acre, September forecast.
Bottom number: % change from previous 2 years' average.

Commodity Overview

The Soviet Situation

Global grain trade in 1991/92 will depend on developments in the Soviet Union, the world's largest grain importer. In 1990/91, the USSR imported nearly 15 percent of total world wheat and coarse grain imports; this year, larger Soviet imports are expected. However, the pattern of Soviet imports will depend on various forms of international assistance from major exporters and smaller suppliers.

Soviet grain production is projected down 19 percent to 190 million tons. The drop for wheat is 21 percent and for coarse grains, 19 percent. Government procurements are proceeding at only slightly more than half the rate of a year ago.

The smaller crop and the slow procurement rate indicate sharply higher Soviet imports in 1991/92. Wheat imports are projected up 40 percent to 21 million tons, the highest since 1987/88, and barley imports at 6.5 million, a 55-percent gain. But corn imports are projected at 8 million, down slightly. Soviet economic conditions, available financial assistance, world prices of wheat and barley relative to corn, and available supplies from major exporters, favor wheat and barley imports over corn.

The anticipated large gains in Soviet purchases of wheat and barley are a primary factor in gains in world grain trade, which is projected up 5 percent. But with large supplies, the EC, Canada, and smaller exporters are expected to benefit the most from the increase in world trade this season.

Since January 1991, the USSR has received $2.5 billion in GSM-102 credit guarantees for the purchase of U.S. agricultural products. EC countries, Canada, Australia, Turkey, and Hungary have also offered assistance for Soviet wheat and barley purchases.

Available U.S. credits cover Soviet purchases of wheat, coarse grains, soybeans and products, and freight costs. Guaranteed credit of $1 billion was allocated in January 1991 and used almost immediately. In June, the U.S. announced another $1.5 billion, of which $600 million was available immediately and has been used. The rest was to be available in fiscal 1992, with $500 million to be released in October and $400 million in February.

On August 26, $315 million of U.S. credit previously designated for FY 1992 was advanced for immediate use. While this decision affects the timing of the guarantees, it represents no change in the total amount available to the USSR under the announced package.

the potential for large wheat exports from major foreign competitors. As the season unfolds and U.S. and global supplies tighten, U.S. wheat prices will rise, and likely average in the $2.70-$2.90 range for the marketing year.

World wheat trade is forecast at 105.8 million tons, up 13 percent and the highest since 1984/85. Competition in the world wheat market is expected to be fierce. The EC harvested a record crop and Canada's output is only slightly below the 1990 record. In addition, several smaller exporters' production is up. And large competitor carryin stocks are keeping available foreign supplies high.

As global imports rise, especially for the USSR and China, record wheat exports are projected for both Canada and the EC. Smaller exporters' volumes also are expected to rise. U.S. wheat exports are forecast up 6 percent to 30 million tons, but market share is projected to fall to 28 percent because of reduced domestic supplies and strong competition.

Record Peanut Crop Expected

The estimated 1991 peanut crop is a record 5 billion pounds, nearly 40 percent larger than last year's drought-reduced 3.6 billion. The increase in production comes from the largest planted acreage since 1951, at nearly 2 million acres, and the highest yield since 1985, at 2,558 pounds per acre. Most of the acreage increase was in Georgia and Alabama, the states hit worst by drought in 1990. Acreage is also up because the effective national poundage quota is larger than last year.

Peanut supplies were tight throughout 1990/91 but will be more than enough in 1991/92 to satisfy a 19-percent increase in domestic food use, to 2.4 billion pounds, and 28 percent higher exports, projected at 825 million pounds. Peanut stocks are forecast to grow to 1.35 billion pounds from this year's 683 million. The season-average farm price is forecast substantially lower, at 27-30 cents a pound compared with 34.1 cents for 1990/91.

The drought that struck Southeastern peanut producing states in 1990/91 slashed output nearly 10 percent and reduced crop quality. This led to calls for an easing of the quota on peanut imports. On July 5, 1991, President Bush announced that the quota would be raised from 1.7 million pounds, shelled basis, to 100 million pounds until July 31.

The original 1.7 million pounds had already been filled, and an estimated 16.3 million pounds were imported during July, leaving 82 million pounds of quota unused. Preliminary data show that 62 percent of U.S. peanut imports in July were from Argentina, 13 percent from China, and small quantities from Singapore, Nicaragua, Hong Kong, Malaysia, and other countries.
[Joy Harwood (202) 219-0840 and Carolyn Whitton (202) 219-0824]

For further information, contact:
Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; Tom Tice and Jim Cole, domestic feed grains; Tom Bickerton and Nancy Morgan, world oilseeds; Jim Schaub and Roger Hoskin, domestic oilseeds; Scott Sanford, world cotton; Bob Skinner and Les Meyer, domestic cotton; Jim Schaub, domestic peanuts. World information (212) 219-0820; domestic (202) 219-0840. AO

Specialty Crops Overview

Processing tomato production is likely to approach 1990's record 10.4 million tons. And with high stocks, wholesale tomato product prices are expected to remain below a year earlier for the rest of 1991.

U.S. sugar production for fiscal 1992 is forecast at a record 7.4 million short tons, raw value, up 6 percent from 1991. U.S. sugar use continues to rise, but is not expected to keep pace with the increase in production.

U.S. tree nut supplies in the 1991/92 marketing season will slip below the year-earlier record of 1.5 billion pounds, due to smaller almond and pistachio crops. However, larger crops are expected for hazelnuts, pecans, and walnuts. (For the latest estimates of specialty crop market conditions and outlook, see tables 20-22.)

Processed Tomato Output Likely To Be Record

Large stocks of canned tomatoes and tomato paste, and the prospects for record or near-record production in 1991, are exerting downward pressure on processed tomato prices. Wholesale prices for tomato paste in August were about 25 percent below a year earlier.

Tomato processors contracted for 8 percent more tonnage in 1991. Cool, wet weather at the start of the season slowed crop development and delayed deliveries to processors. Consequently, the tonnage goals set early in the summer are not likely to be reached. Deliveries of tomatoes to processors continued to trail a year earlier as of early September.

Despite delays in maturity, processing tomato production is likely to approach 1990's record high production. The September forecast placed 1991 contracted production at 10.3 million short tons, up 1 percent from 1990. Contracted production accounted for 98 percent of total production in 1990.

During September, prices of industrial tomato paste (in 55-prices of gallon drums) were running 32-34 cents a pound, f.o.b California, down from about 38 cents in April. The wholesale price for industrial paste ranged from 55 to 57 cents as recently as 1989.

Because of lower domestic prices, imports of canned tomatoes and tomato products (paste, puree, sauce, ketchup, and juice) have dropped and exports have risen. A 100-percent tariff on EC canned tomatoes in retaliation for the EC beef hormone ban also helped cut U.S. imports. Canned tomato imports for the first 6 months of 1991 fell 24 percent from a year earlier and imports of tomato products dropped 38 percent. Canned tomato exports rose 70 percent while tomato product exports rose 42 percent.

With domestic stocks apparently high, prices are expected to continue below a year ago for the rest of 1991. In addition, EC and other foreign processors report large stocks of tomato products, which will keep world prices soft. Any strength in domestic prices would pull additional imports into the U.S.

Vegetable processors forecast sweet corn production under contract up 7 percent in 1991. Production was lower in the East because of dry weather. More acreage and good growing conditions boosted output in the Central and Western areas. Frozen stocks on August 1 were 73 percent higher (cut basis) than a year earlier, and canned stocks appeared to be modestly higher. Wholesale prices are expected to edge higher after the end of September.

Snap bean and green pea production under contract for processing are forecast 2 and 6 percent lower than last year. Wholesale prices are expected to edge higher once carryover stocks are sold.

Record Sugar Production, Lower Nut Supplies

U.S. sugar production for fiscal 1992 is forecast at a record 7.4 million short tons, raw value, 6 percent above a year earlier. Recovery from freeze damage in Louisiana will help boost overall cane sugar production by 415,000 tons. Increased sugarbeet acreage in Idaho, Michigan, and Nebraska and higher yields in Minnesota and North Dakota are expected to boost beet sugar output by 75,000 tons from a year earlier.

U.S. sugar use is expected to rise 1.7 percent during fiscal 1991/92. Sugar use declined during the early 1980's, but grew substantially in the late 1980's.

U.S. tree nut supplies for the 1991/92 marketing season will slip below the 1.5-billion pound record of 1990/91 because of smaller crops of almonds and pistachios. Large crops are expected for hazelnuts, pecans, and walnuts. Carryover stocks from 1990/91 approached record highs.

The 1991 almond crop is forecast at 460 million pounds (kernel weight), down 30 percent from 1990. The almond supply for 1991/92 will be down only 13 percent because of the 279-million-pound carryover from last season.

The industry placed 35 percent of the 1990 crop in reserve pool at harvest to prevent a price collapse. Reserve almonds are withheld from the U.S. market until demand conditions change. Some reserve almonds are diverted to noncompetitive uses such as new products and sales in test markets. Due to strong demand last season, most of the reserve was released into the saleable supply.

Plans call for placing only 10 percent of the 1991 crop in reserve pool. Prices for the 1991 crop are expected to be higher because of the smaller supplies.

Walnut output is estimated at a record 250,000 tons (in-shell basis), 10 percent higher than in 1990. The walnut supply for 1991/92, including carryover stocks, is expected to be 8 percent higher than a year earlier. Walnut prices likely will

Commodity Overview

slip a little from last year because of larger supplies of both walnuts and pecans.

U.S. pecan production is forecast at 292 million pounds (in-shell basis), 42 percent above 1990. Carryover stocks plus expected imports will boost total supply to around 194 million pounds (shelled basis), 6 percent more than for 1990/91. Prices for the 1991 crop are expected to fall from last year's record.

Pecans are an alternate bearing crop, meaning a large crop typically follows a smaller one. But increasing acreage of bearing pecan trees is causing a long-term upward trend in production.

Pistachios also are an alternate bearing crop and 1991 output is forecast at 48 million pounds (in-shell basis), down from last year's record 118 million pounds. Consequently, prices will rise.

Hazelnut (filbert) output is forecast at 26,000 tons (in-shell basis), up 20 percent from a year earlier. The price outlook depends on production in the Mediterranean countries, which produce most of the world's hazelnuts.

Slower Growth for Catfish Industry

Falling prices and rising inventories of market-sized fish suggest slower growth in catfish farming. Processor sales rose more slowly than production capacity in the late 1980's, causing inventories of market-size fish to rise.

Rapid expansion marked the industry during the 1980's as growers expanded acreage in ponds and processors added capacity. The volume of catfish processed and producer prices rose throughout the decade.

Sales of processed catfish rose from $36 million in 1979 to $410 million in 1990, with volume rising 20 percent annually. Catfish ranked fourth (on a quantity basis) in domestic landings of finfish during 1990, behind pollack, salmon, and cod.

However, growth in the volume of fish processed slowed from an average 25 percent a year between 1980 and 1989, to only 5 percent between 1989 and 1990. During the first 7 months of 1991, processed volume rose only 4 percent from a year earlier.

Inventories of market-sized catfish (those over three-fourths of a pound) in July 1991, were up 15 percent from a year earlier. The largest gain was among larger fish weighing over 3 pounds. Delays in harvesting caused by heavy rains during March and April may be a contributing factor to the large inventory.

Because of sluggish growth in processor sales and rising inventories of market-sized fish, the average price paid to producers has fallen. USDA suspended price reporting in March 1991. At the time, average producer prices had fallen to 70 cents a pound from 79 cents during the summer of 1990. Processors' prices continued to fall after March, suggesting that producer prices also fell.
[Glenn Zepp (202) 219-0882]

For further information, contact: Boyd Buxton, fruit; Gary Lucier, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco; Doyle Johnson, tree nuts and greenhouse/nursery; David Harvey, aquaculture; Lewrene Glaser, industrial crops. All are at (202) 219-0883.

AO

Commodity Spotlight

U.S. Cotton Faces Tough Competition

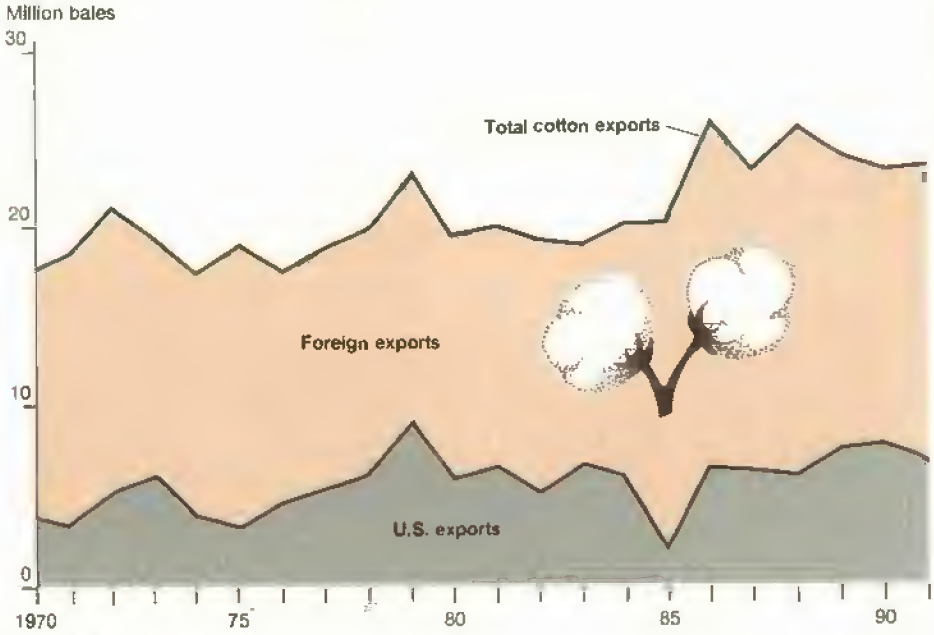
Tough challenges face the U.S. cotton and textile industries. The world is rebuilding cotton stocks this year, with the largest U.S. crop in over 50 years and the second-largest foreign crop.

U.S. planted acreage of 1991 cotton rose 14 percent to 14.1 million acres—the most since 1981. Higher prices last season and changes in cotton program provisions contributed to the boost in acreage. The 1991 acreage reduction requirement for upland cotton was reduced to 5 percent from last year's 12.5 percent. And new planting flexibility provisions of the 1990 Food, Agriculture, Conservation, and Trade Act (FACT) also helped boost acreage.

As a result, the 1991 U.S. cotton crop is expected to be 17.9 million bales—the largest since 1937 and the third-largest recorded since 1790.

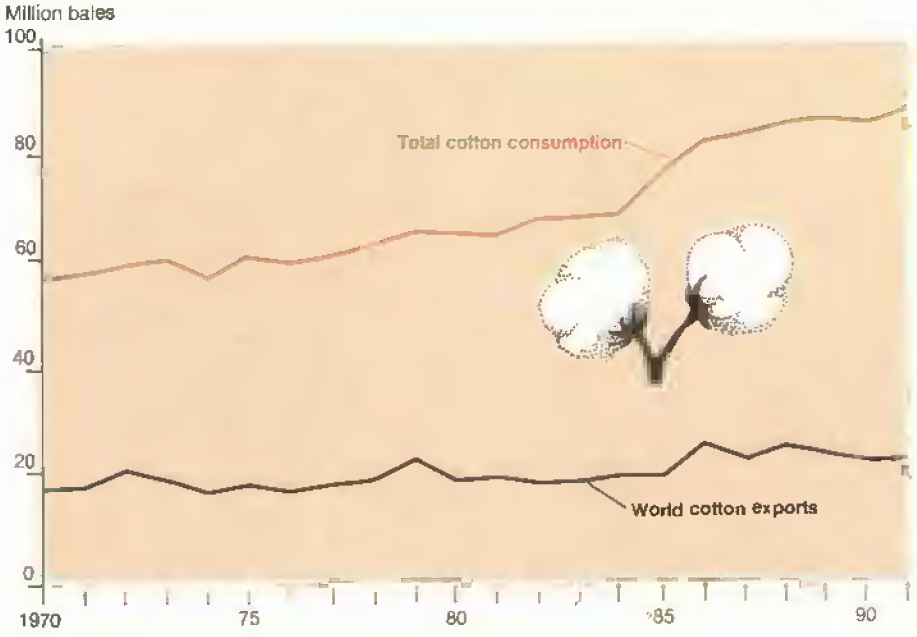
Foreign cotton production, forecast at 73.7 million bales, is the second-largest crop on record. Altogether, a record 91.6 million bales are expected for 1991/92

While Foreign Cotton Exports Rise, U.S. Exports and Market Share Fall



1991 estimated.

Gains In World Cotton Consumption Not Matched by Expansion in Exports



1991 estimated.

global output. Among major producers, output is projected up 4 percent in Pakistan, 6 percent in China, and 9 percent in India.

Domestic Use Is Still Strong

Between 1984 and 1989, U.S. cotton mill consumption rose from 5.5 million bales to nearly 8.8 million, the largest in over two decades. Mill consumption dipped slightly in 1990, but is expected back up to 8.8 million bales in 1991/92. Cotton's share of domestic fiber consumption rose to 33 percent last season, the highest in 19 years, and is likely to hold this share in the coming season.

Cotton's comeback reflects a continuing consumer preference for natural fibers. And mill consumption has managed a steady increase despite significant imports of cotton textiles and apparel. Cotton textile imports are expected to account for 40 percent of total domestic consumption this year, about the same as in the past few years.

Strong Foreign Use, But Lower U.S. Exports

The 1991/92 season is likely to be another year of record cotton consumption among foreign cotton producing countries. And total foreign consumption is projected to rise significantly following 3 years of virtually no change. At 79.2 million bales, foreign consumption is projected up 3 percent from last season, after a 3-year average of 77.4 million bales. But U.S. cotton exports are forecast at 7 million bales, down from last year's 7.9 million.

With foreign use forecast to exceed foreign production by nearly 6 million bales, why the projected downturn for U.S. cotton exports? First, although consumption is growing, trade is not. World trade in cotton is forecast to decline slightly, the result of a combination of factors.

Major foreign producers are expected to consume more of their own larger supplies. And, during the past few years, several countries have expanded their domestic textile capacity. The expansion has allowed countries such as China and Pakistan to emphasize exports of value-added textile products rather than raw cotton, but these textile products displace raw cotton in trade. Similar changes are taking place in countries such as India, Brazil, and Mexico.

Another reason for the decline in world trade is that consumption in major textile-producing countries—which depend on

Commodity Spotlight

cotton imports—has been stagnant in recent years. These markets are traditionally strong importers of U.S. cotton.

Cotton consumption in 1991/92 is projected to fall 3 percent in Hong Kong and 13 percent in Taiwan. No increase is expected in Japan, and a decline is projected in Germany. Lower consumption in these countries results from reduced textile production and imports of cotton yarn and fabric—rather than raw cotton—for further processing.

In addition, U.S. exporters will face tough competition this year because of large supplies. Despite lower production in the Soviet Union, large carryin stocks could allow cotton exports to rise by 1 million bales, to 3 million. Increased interest in cotton production in Australia also is likely to result in larger exports this year. Combined cotton exports from the Soviet Union, China, Pakistan, and Australia are forecast at 7.3 million bales—1.6 million more than last year.

All of these factors lead to a lower forecast for U.S. cotton exports and a decline in market share to a more normal 30 percent.

Competing Step by Step

The 1990 farm legislation, FACT, added some new provisions and extended others from the 1985 farm legislation to help keep U.S. cotton competitive. The marketing loan program, inaugurated in the 1985 legislation, was continued.

The program allows producers to repay government loans at either the loan rate, or the world price, as determined by the Secretary of Agriculture and adjusted for U.S. location and quality (AWP), whichever is lower. If the AWP falls below 70 percent of the loan rate, producers repay at 70 percent of the loan rate, and certificates are issued to handlers to make up the difference.

In addition to the marketing loan program, FACT added a new 3-step competitiveness procedure to help ensure that U.S. cotton prices remain in line with foreign prices. These provisions will be implemented for the 1991-95 marketing years.

Step 1 allows a discretionary reduction to the AWP. USDA is allowed to reduce the AWP when:

- the lowest weekly average U.S. price quote for delivery in Northern Europe (U.S.-Northern Europe price), exceeds the average of the five cheapest growths of cotton quoted for delivery in Northern Europe (Northern Europe price); and,
- the AWP falls below 115 percent of the loan rate for 1991 upland cotton, which is 50.77 cents per pound.

The maximum allowable adjustment is the difference between the U.S. price in Northern Europe and the Northern Europe price. The Secretary used the discretionary authority to adjust the AWP under Step 1 in 2 of 5 weeks ending September 12, 1991.

Steps 2 and 3 of the competitiveness provisions are not discretionary. Under Step 2, the Secretary must issue marketing certificates, which lower the effective purchase price of cotton, to domestic users and exporters when the lowest U.S.-Northern Europe price exceeds the Northern Europe price by more than 1.25 cents per pound for 4 consecutive weeks.

After the first 4 weeks of the 1991/92 season, the certificate program was triggered. The U.S. price in Northern Europe exceeded the Northern Europe price by more than 1.25 cents per pound during the first 3 weeks of the season and by 2.41 cents during the fourth week.

Therefore, domestic cotton users and exporters received 1.16 cents per pound (2.41 minus 1.25) on eligible cotton for the week ending September 5, 1.86 cents per pound for the week ending September 12, and 2.23 cents per pound for the week ending September 19. Certificates will continue to be issued for any consecutive 4-week period when U.S. and foreign prices diverge by more than 1.25 cents per pound.

Step 3 provides for an additional special import quota if Steps 1 and 2 do not make U.S. cotton competitive. The quota is triggered if the lowest U.S.-Northern Europe price (adjusted for the value of any marketing certificates issued) exceeds the Northern Europe price by more than 1.25 cents per pound for 10 consecutive weeks.

The quota would be equal to 1 week's consumption of upland cotton by domestic mills. A week's worth of consumption is calculated by taking a seasonally adjusted average of the most recent 3 months' consumption. This provision could not be triggered before October 10, 1991. But based on current consumption data, domestic mills would be allowed to import 174,000 bales under this special quota.

Promoting Cotton

The 1990 FACT also added several amendments to the 1966 Cotton Research and Promotion Act, which should have positive long-term impacts on the U.S. cotton industry. One amendment provides increased funding for expanding and maintaining new and existing domestic markets.

Since 1967, U.S. producers have provided funding for cotton promotion and research activities. Funding was based on the volume and the value of cotton production. But producers could request refunds for the entire amount of their assessment. Historically, about one-third of the assessments have been refunded to producers.

In a referendum held in July, cotton producers and textile and apparel importers voted to terminate the right of U.S. producers to demand a refund of their assessments. The producers and importers also voted to assess imported raw cotton and cotton textile products that contain foreign-produced cotton. Initial estimates for 1991/92 suggest that the program may generate nearly $50 million ($42.8 million from U.S. producers and $6.8 million from imports). The funding represents a substantial increase over previous levels.

With prospects for larger U.S. supplies this season, the marketing loan program and the competitiveness provisions are expected to generate competitive cotton prices this season. Domestic and foreign mills are more likely to encounter similar cotton prices, and U.S. merchants should be able to compete more effectively for limited export markets. *[Bob Skinner (202) 219-0840]* AO

Hawaii's Sugar Industry Under Stress

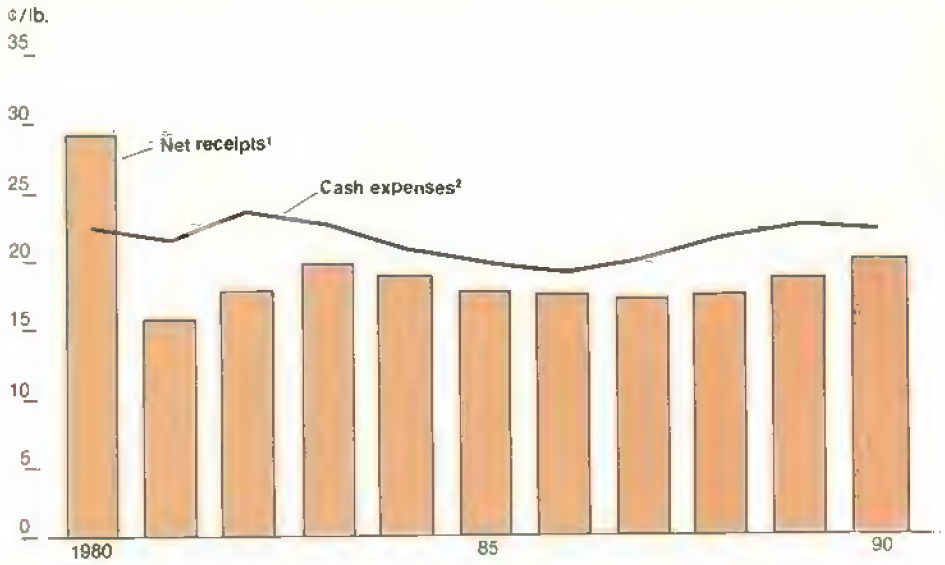
Sugar cane acreage and production in Hawaii are decreasing. Major factors contributing to the decline are low returns to producers and processors, company mergers and exits from sugar production, high labor and marketing costs, a housing shortage, and competition for land.

Hawaii's sugar production peaked at 1.2 million tons in 1968, has steadily dropped since 1986, and is estimated at 805,000 in 1991. Output has fallen from 38 percent of all U.S. cane sugar in 1975 to 26 percent in 1990. Hawaii's share of combined U.S. beet sugar and cane sugar production has declined from 17 percent in 1975 to 11 percent in 1990.

Total cane acres have continuously declined since 1968 when 242,000 acres were cultivated for cane production, to about 160,000 in 1990. Less than half of the total acres is harvested for sugar each year, since the harvesting-to-planting cycle averages 24 months. With rainy weather adversely affecting the 1989 crop harvesting and replanting schedule, and planned acreage reductions, sugarcane production for 1991 is expected to be down slightly from a year earlier and 35 percent below the 1968 record.

The viability of sugarcane, grown commercially in Hawaii since 1835 and the state's leading crop, is important to each of the islands' economies. Sugarcane is grown on the four largest of Hawaii's islands, provides direct and indirect employment to over 17,000 people in the state, and generates about 10 percent of all electricity in Hawaii.

Since 1981, Net Receipts to Hawaiian Sugarcane Producers Have Failed to Cover Cash Expenses



1990 estimated.
¹Net receipts to sugarcane producers equal the price of raw sugar less refining costs.
²Includes production and processing costs.

Marketing & Labor Costs Higher in Hawaii

Hawaii has several advantages as a sugar producer. At almost 100 tons per acre, its sugarcane yields are the highest in the world, producing from 10 to 18 tons of sugar per acre and averaging 11.5 tons. It is one of the few sugar producing areas in the world where the crop age averages 24 months at harvest, thus minimizing field operations while maximizing sugar output per acre. On the mainland, the planting-harvesting cycle averages 12 months.

Hawaiian sugarcane producers have the highest nonland capital expenses per ton among U.S. producing states, and substantially higher per-ton production and processing costs than Florida, Louisiana, or Texas, the only other sugarcane producing states. The higher costs reduce the competitive advantage of Hawaii's high-yielding cane crop.

Specifically, transportation expenses are higher for Hawaiian producers, partly due to the costs of shipping Hawaiian sugar to California for refining. And because of the greater demand for skilled labor for sugar production in Hawaii and competition from other industries, labor costs (including benefits) per pound of raw sugar are almost double the mainland costs based on data for the 1989 crop. Marketing costs per pound for raw sugar to the Gulf and East Coast markets are about double those of Florida and Texas sugar producers and 4-5 times Louisiana's marketing costs.

And while Hawaii's 2-year crop produces higher yields, harvesting requires larger machines due to the terrain, type of soil, and weight of the crop. Most Hawaiian producers own and operate their own road systems for trucking cane from the fields to the mills due to the size and weight of the hauling equipment. This raises both repair and maintenance costs, as well as necessitating greater capital expenditures.

Also, sugar mills in the Southern U.S. have reduced costs by consolidating operations. Consolidating Hawaiian sugar mills is difficult because sugarcane production areas are dispersed among

Commodity Spotlight

the four islands, and often widely dispersed on each island. Consolidation would raise transportation costs considerably.

From 1975 to 1985, most Hawaiian sugar cane producers invested substantial capital in installing drip irrigation systems. This method uses a fixed underground piping system in the fields with replaceable tubing. Although requiring substantial initial capital outlays, in the long run this investment should help producers with costs, since drip irrigation is less expensive to operate and maintain than the furrow systems used previously. Drip irrigation is also more efficient and makes more effective use of available water than furrow systems.

Producer Returns Stagnated in the 1980's

Virtually all sugar in Hawaii is marketed through a producer-owned refining and marketing cooperative, the California and Hawaiian Sugar Company (C&H). Sugarcane producers' receipts equal the refined sugar price plus returns from limited raw sugar sales, less the cost of refining. From these receipts, sugarcane growers pay cash expenses such as labor, fuel, and interest.

Although actual raw cane sugar market prices have averaged 2 to 5 cents above the price established by the sugar price support program since 1982, receipts to Hawaiian producers and processors have not been sufficient to cover cash or total economic costs since 1981 (including returns to ownership and capital replacement). Cash expenses for production and processing have averaged 19 to 23 cents per pound of sugar sold from 1980 to 1990.

Receipts to the producer-plantations for refined sugar sold by C&H averaged 17 to 20 cents from 1981 to 1990. Thus, since 1981, receipts have been slightly below producer cash expenses and total economic costs every year.

Although the price of sugar is supported by the U.S. sugar program, rising costs have reduced net returns. In 1981 the U.S. program established a domestic sugar price based on a loan rate for raw sugar that was set at 16.75 cents a pound in 1982, rising in stages to 18 cents for 1986. The current program continues the minimum raw cane sugar loan rate at 18 cents.

Labor & Housing Costs Are High

Unlike farming areas where crops are seasonal, Hawaii's sugar industry operates 24 hours a day, 10 to 11 months a year, providing year-round employment for its workers. As the Hawaiian cane industry fully mechanized its planting and harvesting operations in the 1970's and 1980's, fewer laborers were needed. However, the work shifted from unskilled labor to jobs requiring skills to operate and repair field and factory equipment. The minimum 1991 starting wage paid to Hawaiian cane field workers is $7 to $8 per hour, considerably higher than the U.S. minimum wage of $4.25.

Skilled labor is generally scarce, and attracting and retaining skilled workers is a problem for most companies, especially for the larger sugar companies that operate about 35,000 acres and employ almost 700 people.

While most companies own and maintain some housing for their workers, providing an incentive for some workers to remain with a sugar company, affordable housing in Hawaii is difficult to find. And building additional company housing is not likely, since rezoning of agricultural land for housing and other purposes is difficult in each of the cane areas.

But Disease & Pest Losses Are Minimal

The Hawaiian sugarcane crop is exposed to a variety of pests and diseases, but the use of natural predators, rather than chemicals or insecticides, limits pest infestations, and disease damage is minimized with the continued development of resistant sugarcane varieties. The Hawaiian Sugar Planters' Association funds an experiment and research station that develops new plant varieties, irrigation systems, and methods for controlling insects, diseases, weeds, and rodents.

Pests currently threatening Hawaiian sugarcane are the lesser cornstalk borer and yellow sugarcane aphid. A tiny Bolivian wasp, a new natural enemy of the borer, has been introduced to help control the borer, and natural enemies are keeping the aphid under control. Yellow leaf syndrome was detected in 1991 and has caused some yield loss this year. However, a program for fighting this virus has been developed and the virus is not currently seen as a serious threat.

High-Valued Crops Are Replacing Cane Acreage

To combat lower net returns, in 1981 the Hawaiian sugar industry began a program to cut costs and enhance productivity. The program included changes in operations and increased capital investment.

Hawaiian cane fields are not rotated with other crops, and in some areas the same land has been used in sugarcane production for more than 100 years. After sugarcane is harvested, it is hauled to a sugar mill on the Islands where it is crushed and milled into raw sugar. Hauling distances and yields, which determine the profitability of a field, and competition for leased land are critical factors in deciding if fields located great distances from a company's mill stay in cane production.

Some cane has been replaced with more profitable but longer term crops such as coffee, macadamia nuts, and pineapples. One company is experimenting with growing oranges, another has started marketing coffee in California, one company started phasing out 3,300 acres in 1991 due to distance from the mill, and another company is selling 3,800 acres to help reduce its debt.

While many alternative crops offer high returns and crop diversity, limited access to markets and the potential for market saturation have deterred the remaining Hawaii sugar companies from completely abandoning sugar production.

Commodity Spotlight

Because sugarcane production requires continuous large capital investments and because of low returns for sugar, the number of independent cane producers has fallen from 363 to 40 in the past decade, producing less than 1 percent of Hawaii's sugarcane.

Technology Is Key to Sugar's Future in Hawaii

The future of the Hawaiian sugarcane industry depends on several factors:

- further improving sugar recovery from cane, which has increased from 233 pounds of raw sugar per short ton of cane in 1975 to an estimated 251 pounds in 1990;
- improving yields of sugar per acre, which declined to 11.6 tons in 1990 after increasing from 10.5 tons per acre in 1975 to 12.5 tons in 1987; and
- producing high-value alternative products from sugar and its by-products.

To remain competitive, Hawaiian sugarcane producers have undertaken several research projects to recover more sugar from the cane and add value to its by-products. These include:

- adapting ion exclusion technology, a chemical process designed to extract additional raw sugar from molasses, to improve sugar recovery from cane;
- developing fiber products, plastics, and industrial chemicals from sugar;
- producing high-value products from molasses, including acids, ethers, biodegradable plastics, and high-protein cattle feeds; and
- developing a steam explosion plant, with controlled application of high-pressure steam bursts for more economical extraction of useful chemicals contained in the bagasse (the plant should be operational by late 1991).

The remaining sugarcane producers are combining effective farming practices with the latest advances in technology to increase yields and sugar recovery and lower production and milling costs. *[Annette Clauson (202) 219-0890]* AO

October Releases from USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

October

1	*Trout Production*
2	*Egg Products*
	Poultry Slaughter
4	*Dairy Products*
7	*Celery (1 p.m. report)*
10	*Crop Production*
11	*Vegetables*
15	*Turkey Hatchery*
16	*Milk Production*
21	*Catfish*
22	*Cattle on Feed*
	Cold Storage
23	*Eggs, Chickens, & Turkeys*
25	*Livestock Slaughter*
30	*Peanut Stocks & Processing*
	Catfish Production
31	*Agricultural Prices*
	Rice Stocks

World Agriculture & Trade

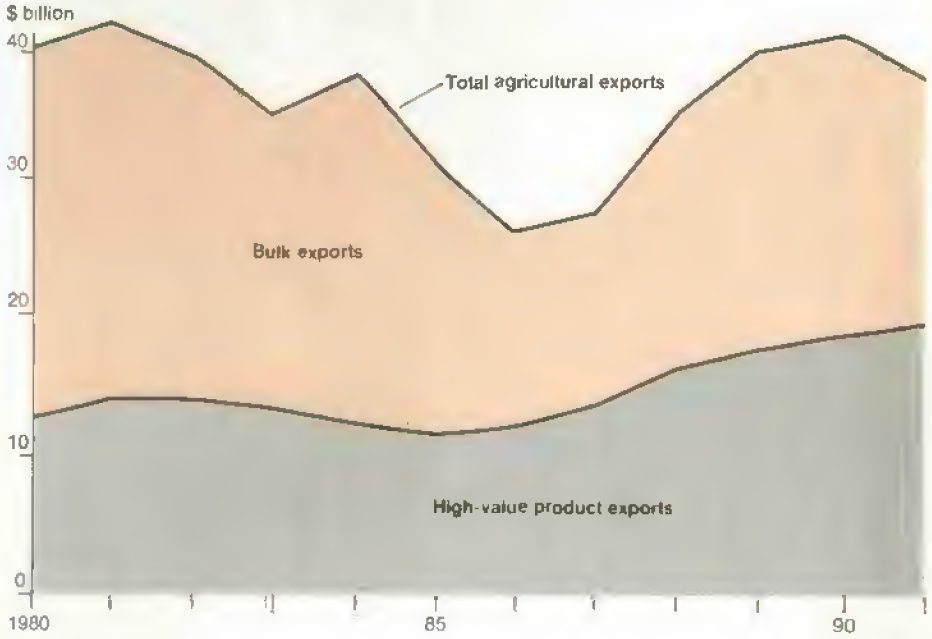
High-Value Exports Lead U.S. Ag Trade

In fiscal 1991, high-value product (HVP) exports exceeded bulk exports, a development virtually unprecedented for U.S. agricultural trade. Except during the two world wars, bulk exports have almost never accounted for less than half the value of U.S. farm product exports in recent history. Accounting for much of this shift in favor of high-value products are long-term changes in relative prices and recent government intervention in world markets.

High-value products are those that have received additional processing beyond the farm gate or represent a higher priced segment of a group of differentiated products. Perhaps the clearest definition of HVP exports is that they are all agricultural exports other than raw grains, oilseeds, cotton, and tobacco.

Flour is an example of wheat processed into an HVP after leaving the farm, and wheat for seed is a high-priced subset of wheat exports that can be considered HVP. All meats and animal by-products are considered HVP because of processing at packing plants.

High-Value Products Capture a Larger Share of U.S. Agricultural Exports



1991 estimated.

Since a substantial proportion of U.S. livestock consumes processed feed rather than pasture, U.S. animal product exports have frequently been called HVP's in the form of value-added grain. U.S. fresh fruit and vegetable exports tend to be higher quality than average U.S. production, and because of specialized handling have further value added outside the farm gate.

The HVP share of U.S. agricultural exports has been rising since 1985. From 1950 to 1985, HVP's accounted for about one-third of the value of U.S. agricultural exports. Since 1985, however, HVP's accounted for an increasing proportion of U.S. exports. The increase was driven both by gains in HVP shipments and by the relative sluggishness of bulk exports. During the 1970's, U.S. agriculture's rapid export gains were largely the result of rising bulk exports, but in the 1980's bulk exports fell.

Bulk Products Determine Export Mix

Changes in bulk product exports are far more important than HVP's in determining the relative proportions of the two. For example, during the 1980's, the largest increase in HVP's share by far came in fiscal 1986, a jump from 39 percent to 49 percent. Bulk exports plummeted $5.6 billion that year as competitors' prices fell in anticipation of lower U.S. loan rates while U.S. prices remained high. Higher Soviet grain production—which helped reduce Soviet grain imports by 50 percent—also cut U.S. bulk exports in 1986.

As the U.S. recovered its share of world trade in bulk commodities during the second half of the 1980's, the value of U.S. bulk exports kept pace with HVP exports. Prices for bulk agricultural exports also tended to rise during the second half as global stocks fell. With U.S. bulk export volume and prices relatively strong, the share of U.S. exports accounted for by HVP's fell back to 46 percent in fiscal 1989 and 1990.

In fiscal 1991, however, the value of bulk exports fell again—from $21.3 to $17.5 billion—while HVP exports continued rising, to nearly $20 billion. The decline in bulk export value caused the total value of U.S. agricultural exports to fall for the first time in 5 years. Fiscal 1991 agricultural exports declined by an estimated $2.5 billion to $37.5 billion.

Most of the decline in bulk export value occurred in grains. U.S. grain exports slumped following a record 1990/91 world wheat crop, record grain production in China, and a near-record 1990 grain crop in the Soviet Union. With production up in the Soviet Union, and less ability to finance purchases during fiscal 1991, Soviet coarse grain imports from all sources fell an estimated 9 million tons, accounting for most of the decline in world trade.

China's improved grain production, in addition to lowering imports, also drove China's coarse grain exports to their highest in 5 years. With world trade shrinking and competitor exports rising, U.S. coarse grain exports fell an estimated 17 million tons or $2.3 billion in fiscal 1991.

Volume changed less for U.S. wheat exports during fiscal 1991 than coarse grains, but prices fell substantially on world markets. The volume of U.S. wheat and flour exports fell only 1 million tons to 28 million, but export value fell $1.4 billion. Importers overseas paid about $45 per ton less for U.S. wheat than in fiscal 1990 as increased world supplies drove prices lower. As world prices fell further below the European Community's (EC) domestic prices, export subsidies by the EC and other countries rose sharply, driving world wheat prices still lower.

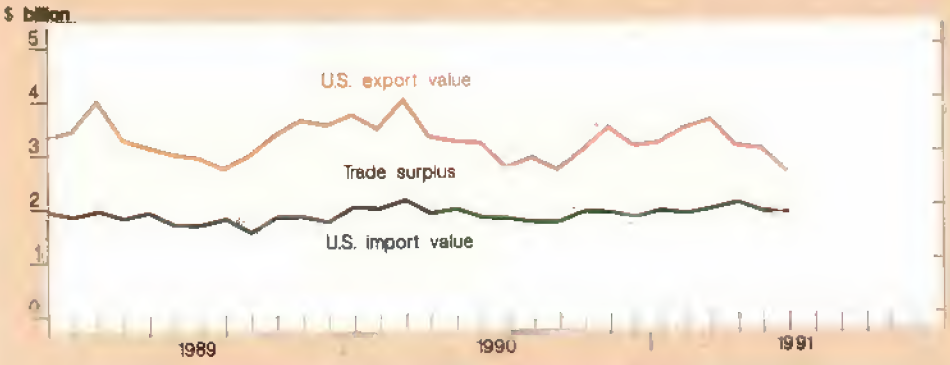
Little Change Expected In Fiscal 1992...

Little change is expected in total export value in fiscal 1992, and it is very likely that HVP exports will again exceed bulk exports. The volume of U.S. coarse grain exports is expected to fall 3 million tons as U.S. production drops and world demand remains weak.

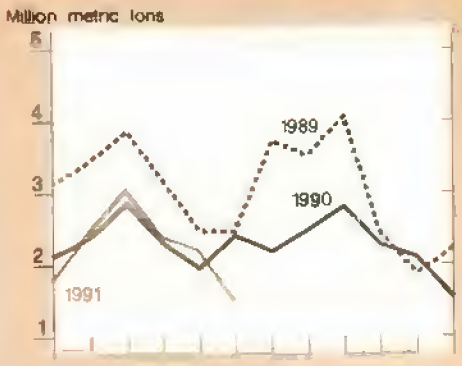
Although the Soviet Union's coarse grain production is forecast to fall more than 20 million tons, Soviet imports are not expected to rise more than 1 million. Higher Soviet wheat imports from all sources are expected during the 1991/92 marketing year. However, the global wheat marketing year ends in June,

U.S. Trade Indicators

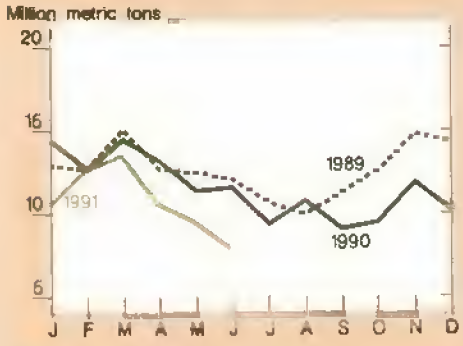
U.S. agricultural trade balance



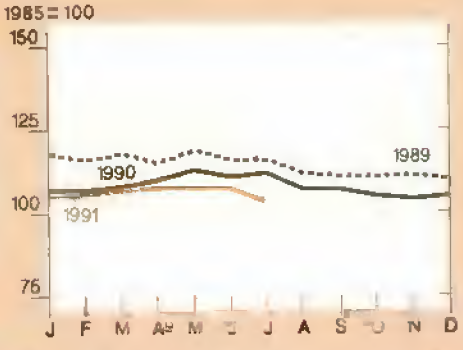
U.S. wheat exports



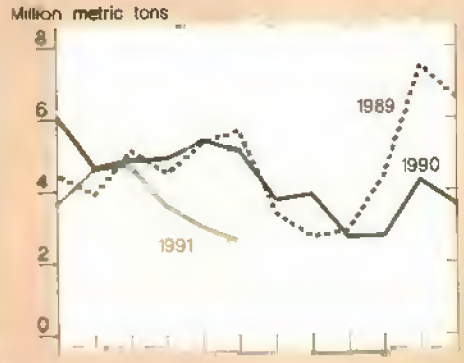
Export volume



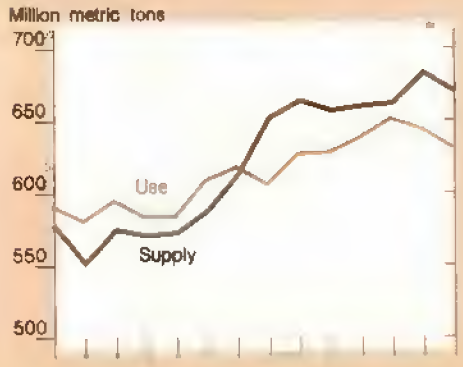
Index of export prices



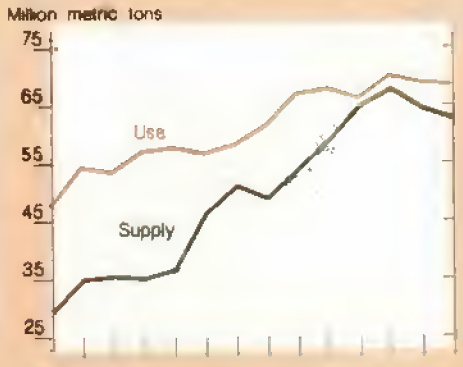
U.S. corn exports



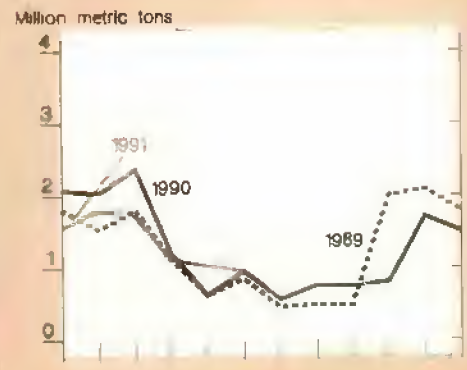
Foreign supply & use of coarse grains



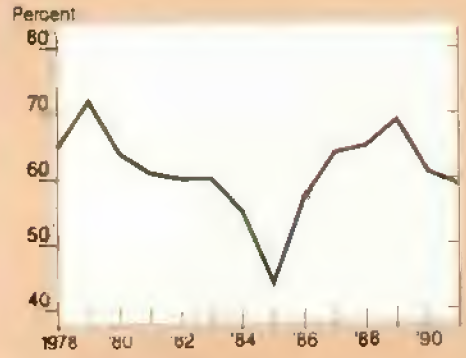
Foreign supply & use of soybeans



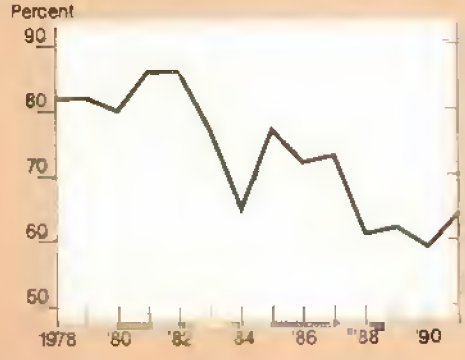
U.S. soybean exports



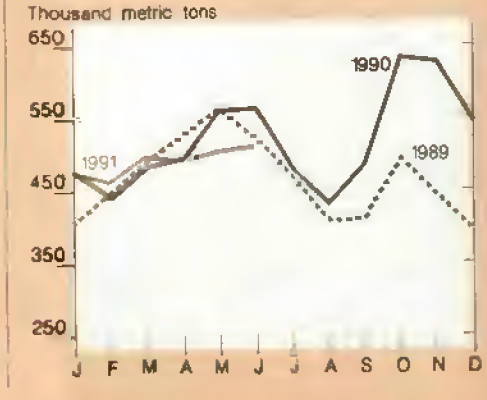
U.S. share of world coarse grains exports[1,2]



U.S. share of world soybean exports[1,2]



U.S. fruit & vegetable exports[3]



[1]Excluding intra-EC trade [2]October-September years. [3]Includes fruit juices

making comparisons with fiscal year 1992 difficult.

In fiscal 1991, U.S. agricultural exports to the Soviet Union totaled an estimated $1.9 billion, virtually all under U.S. GSM-102 credit guarantees. The total credit package available to the USSR during fiscal 1991 and 1992 was $2.5 billion as of September 4, 1991, although USDA's fiscal 1992 GSM-102 allocations are far from finalized and guarantees to the Soviet Union in 1992 are uncertain.

The Soviet Union's ability to make cash purchases or even receive credit will probably remain an issue during fiscal 1992 as in 1991. Similarly, food aid shipments from some exporters to the Soviet Union occurred in 1991 and could occur again in 1992. While future events in the Soviet Union are uncertain, as are other countries' responses, USDA's most recent projections for Soviet coarse grain imports leave little leeway for a significant rebound in U.S. exports to the USSR in fiscal 1992.

U.S. soybean and soybean meal exports are expected to rise during fiscal 1992, but cotton exports are likely to fall. The U.S. share of world cotton trade soared to 34 percent during the 1990/91 marketing year as overseas supplies tightened and importer demand drove prices higher. But increased foreign production during 1991/92 is expected to lead to increased supplies overseas, a reduced U.S. share of world trade, and larger world ending stocks.

...But HVP Exports Could Increase Slightly

U.S. high-value exports could increase during fiscal 1992. Japan is scheduled to lower its tariff on imported beef at about midyear from a rate of 70 percent to 60 percent. Economic growth in Mexico, an important market for U.S. animal product exports during fiscal 1991, is expected to exceed 4 percent in 1992. And, in the absence of another freeze in California, exports of oranges and some other products are likely to improve.

However, the strengthening of the U.S. dollar on foreign exchange markets during much of fiscal 1991 could restrain growth in U.S. HVP exports in 1992. Between October 1990 and July 1991, the U.S. dollar gained 5 percent in real trade-weighted terms. During the 1980's, changes in U.S. HVP exports were highly correlated with past changes in real exchange rates.

With little change expected in U.S. agricultural exports in fiscal 1992, HVP's are likely again to account for more than half of total agricultural export value, as in 1991. This would probably be the first time since the early 19th century that bulk products failed to dominate (excluding shipments during wartime).

The earliest agricultural exports from North America were HVP's such as indigo and furs. As the country developed, tobacco and cotton exports—particularly cotton—dominated trade for much of the 19th century. Improvements in transportation made grain exports increasingly important in the second half of the century.

The U.S. ability to increase production of bulk products through mechanization and innovation sustained their dominance of agricultural exports well into the 1980's. Real prices of bulk products generally fell over time, with the 1970's and early 1980's a temporary exception.

During the last 20 years, prices of U.S. agricultural exports (including both bulk and HVP) have risen about 130 percent. At the same time, U.S. consumer prices and nonfarm export prices have risen more than 200 percent. As relative prices of raw agricultural products have declined, cash receipts from farm marketing have gone from as much as 7 percent of GNP during the early 1960's to 3 percent since 1985.

Several factors account for the long-term decline in prices of raw farm products in industrial market economies. One is the long-term tendency of food consumption expenditures to increase more slowly than income. Another is the tendency of prices of manufactured goods to rise more rapidly than raw materials.

Finally, widespread intervention in agriculture by governments has increased production in regions of the world that have no natural comparative advantage for producing farm products. Estimates of global transfers supporting agriculture averaged nearly $100 billion annually during 1982-86. The price impact of this intervention has fallen most heavily on bulk products, particularly grains.
[Stephen MacDonald (202) 219-0822]
AO

Farm Income Drops Below 1990 Record

Prospects for 1991 farm incomes have improved since midsummer, but are still forecast below 1990's high levels. Net cash income is currently forecast down about 10 percent, and net farm income about 5 percent below the 1990 record—estimated at about $50 billion.

Slightly higher production expenses and larger supplies of several commodities are the major factors contributing to the lower income forecasts. But cash receipts for several crops will rise due to the effects of this year's drought.

Cash grain production is down 9 percent this year. The largest single reduction is for oats (27 percent), but oats only account for some 5 million acres. More important for U.S. cash receipts is wheat, where production is down 26 percent, and quality problems are holding prices down. And because world stocks of wheat are still high, prices are not rising sufficiently to compensate for the lower quantities, causing wheat receipts to fall some 16 percent.

Cotton shows the strongest output increases of the major field crops, with production forecast up 14 percent in response to last year's high prices. Fruit receipts are also predicted strong as prices have risen in the wake of last winter's freeze in California.

In the livestock forecast, cattle and calf receipts are improving, but at the expense of lower hog receipts. Dairy prices are still down from a year ago but are showing a slight improvement over earlier this year.

Crop Receipts Outperform Livestock

Cash receipts for U.S. crops are forecast up 3 percent this year. Drought across many parts of the Corn Belt is reducing corn yields dramatically, but higher prices will more than compensate, and feed grain receipts are forecast to rise 3 percent. Oilseed receipts are down 2 percent and wheat receipts will show a 16-percent fall.

The strongest crop subsector for cash receipts is fruits and nuts. Freeze-induced higher fruit prices will push fruit and nut receipts to over $11 billion, a 26-percent jump from 1990. While vegetable receipts will probably fall slightly, the difference of $100 million will still leave vegetable growers with receipts of $10 to $12 billion.

Red meat receipts are essentially unchanged from 1990, with a very slight increase in cattle and calf receipts compensating for somewhat lower hog receipts. Broiler receipts are continuing to fall from 1989's high, but turkey receipts are up 2 percent.

The most dramatic event affecting livestock and dairy in the past 2 years was a collapse in milk prices in August 1990. Low milk prices will leave 1991 dairy receipts down 12 percent. This large drop for dairy causes overall 1991 livestock receipts to fall 3 percent. Total crop and livestock receipts are forecast to slide 1 percent.

Expenses Up $2 Billion, Program Payments Down

Production expenses for 1991 are forecast between $145 and $150 billion, up 1 percent. Leading the increase in expenses are labor expenses, short-term interest expenses, and seed costs. Total feed expenses are falling 1 percent, as are expenses for feeder livestock, with a drop in number of cattle on feed offsetting higher feed prices. Labor expenses are forecast to increase 5 percent.

The latest published forecast of government payments, in July 1991, is still valid at $8 to $9 billion. With September crop reports showing less corn and a higher season-average price than during the summer, corn deficiency payments are expected to fall, but the effects will not be felt until 1992.

Advance payments have already been made and are included in the 1991 payment forecasts. Five-month payments, reflecting the new price and quantity forecasts for corn, will not be made until calendar 1992.

Southeast Alone Shows Income Rise

Although U.S. net cash farm income is forecast down this year, one region is showing improvement. From Kentucky through Florida, Southeastern feedgrain producers will benefit from higher prices while not having to contend with drought. Alabama and Georgia cotton will add to incomes in the region, as will Florida citrus. The other four agricultural regions can expect lower incomes compared with 1990.

Crop receipts will be up in the Northeast, Southeast, and the West while total livestock/dairy receipts are expected to fall across all regions. Government payments are forecast to fall from 10 to 20 percent in all regions but the West. This mimics last year but by a somewhat smaller percentage. While Western payments are increasing, the rise is only slightly over 1 percent, leaving an 11-percent decline in government payments for the nation as a whole.

Farm Finance

Fruit & Nut Farms Are Big Income Gainers

Consistent with price changes for the various commodities, the fruit and nut subsector is showing the greatest net income improvement among farm types. Freeze-induced higher fruit prices are driving up cash receipts, and with only a slight rise in expenses, these farmers will see their cash incomes rise faster than any other group of farmers or ranchers. This single group is responsible for the overall income increase for crop farms, as cash grain farms suffer from low wheat receipts and their incomes drop some $1 billion.

Among livestock producers, total net cash incomes will drop below those of crop farms for the first time in several years. Red meat and poultry producers are seeing slight declines, but dairy farms account for most of the livestock drop.

Farm Finances Stable In 1990

U.S. farm and ranch operators ended 1990 in a relatively stable financial condition, according to USDA's Farm Costs and Returns Survey. About 2 percent more farm operations than in the previous year ended 1990 with outstanding liability. Yet 47 percent of farms and ranches still report no outstanding debt at year's end. Also, fewer farms and ranches had debt/asset ratios over 0.70.

Average debt/asset ratios have been declining since 1986 when they peaked at 0.22. For 1990, the debt/asset ratio averaged 0.13, slightly lower than the 0.14 in 1989. Surveyed farmers reported both asset values and debt increasing, but assets were increasing faster, leaving an average $35,000 increase in net worth.

Most of the asset increase was in livestock inventories, financial assets of the farm business, and real estate values. Crop inventory values fell, while equity increased 15 percent, continuing the recovery from the downturn of the early 1980's.

Farm debt has increasingly become concentrated on farms with debt/asset ratios of 0.01 to 0.40, growing from one-third of the debt of farm operators during the mid-1980's to 57 percent at the end of 1990. In contrast, the debt held by farmers with a debt/asset ratio over 0.70 has declined from nearly a third 5 years ago to a current level of about 12 percent.

Fifty-five percent of the surveyed operations were in a favorable financial position, with low debt and positive incomes, about the same as the previous year. These profitable, low-leveraged businesses are able to take advantage of investment or expansion opportunities.

Negative income and high debt caused 7 percent of farms to be categorized as vulnerable, again about the same as in 1989. The stability evidenced by the major financial performance measures, coupled with gains in real estate values over the last 5 years, reflects the healthy condition of the farm sector as a whole.

Although financial conditions were considered stable in 1990 for all farms on average, operations with over $100,000 in gross sales saw conditions improve considerably. And, in the largest sales category of over $500,000, the proportion of favorable operations jumped 6 percentage points, while the vulnerable operations fell from 8 percent in 1989 to 4 percent in 1990. Livestock receipts were particularly strong in the larger sales classes. *(Bob McElroy (202) 219-0800)* AO

Upcoming Reports from USDA's Economic Research Service

The following are October release dates for summaries of the ERS reports listed. Summaries are issued at 3 p.m. Eastern time.

October

16 *Agricultural Resources--Inputs*
21 *Agricultural Outlook*
22 *Dairy*
23 *Rice*
24 *Oil Crops*
25 *Food Review*

Resources

CRP Continues Eastward Shift

USDA has tentatively accepted 1.1 million additional cropland acres into the Conservation Reserve Program (CRP) following an 11th signup. The increase, selected from over 2.3 million acres offered by farmers in July, continues an eastward enrollment shift begun in the 10th signup last March. The 11th signup was the only opportunity for farmers to enroll new CRP acres for the 1992 crop year.

Adding the 33.9 million acres retired in signup periods 1 to 9, and the 565,000 and 1.1 million acres tentatively accepted in the 10th and 11th signups, would bring total CRP enrollment to 35.6 million acres. However, because farmers had the option to withdraw their tentatively accepted 10th and 11th signup offers, final enrollment will likely be somewhat less.

Corn Belt's Share Increases

Of the 1.1 million acres tentatively accepted in the 11th signup, 34 percent is in the Corn Belt region. This is a sub-

stantial shift from the first nine signups when the Corn Belt averaged only 14 percent, and even from the 10th signup when it accounted for 28 percent of total acceptance. Fully 80 percent of the land offered by Corn Belt farmers in the 11th signup was accepted.

Almost 16 percent of the total tentatively accepted acres was in the Lake States region, where nearly 69 percent of the land offered by farmers was accepted. The Appalachian and Delta regions also had high acceptance rates—71 and 69 percent—although the number of acres accepted for enrollment in these regions was relatively low.

Only 32 percent of 11th-signup accepted acreage is located in the Northern Plains, Southern Plains, and Mountain regions—similar to the 30 percent accepted from these regions in the 10th signup. In contrast, they accounted for 62 percent of the acreage enrolled in signups 1-9. Acceptance rates in the 11th signup for these three western regions were 25, 48, and 24 percent.

The eastward shift is the result of a significantly redesigned CRP bid acceptance process and new eligibility criteria. Consistent with the Food, Agriculture, Conservation, and Trade Act of 1990 (FACT), new USDA program rules for CRP operation place greater emphasis on water quality improvement and on maximizing conservation and environmental benefits for each dollar spent (for more on the revised CRP operating rules see the June 1991 *AO*).

More Enrollment in Priority Areas

More than 152,000 acres, or 14 percent of the tentatively approved 11th-signup acres, came from Conservation Priority Area watersheds located in the Chesapeake Bay, Long Island Sound, and the Great Lakes region. This is slightly greater than the percentage enrolled in these watersheds in the 10th signup. The 1990 legislation requires that USDA attempt to achieve a significant level of enrollment in these watersheds to maximize water quality and wildlife habitat benefits.

In addition, more than 16,000 acres were accepted in high-priority watersheds located throughout the nation and specifically targeted by USDA in coordination with the President's Water Quality Initiative. Nearly half are located in the Corn Belt.

Eleventh Signup Adds More Than 1 Million Acres to CRP

Signup period	Accepted contracts	Accepted acres	Average rental rate	Average erosion reduction
	Thousand	*Million*	*$/acre/yr.*	*Tons/acre/yr.*
1985 Farm Act:				
#1 March 1986	9.4	0.75	42.06	26
#2 May 1986	21.5	2.77	44.05	27
#3 August 1986	34.0	4.70	46.96	25
#4 February 1987	88.0	9.48	51.19	19
#5 July 1987	43.7	4.44	48.03	17
#6 February 1988	42.7	3.38	47.90	18
#7 July 1988	30.4	2.60	49.71	17
#8 February 1989	28.8	2.46	51.04	14
#9 July-August 1989	34.8	3.33	50.99	14
1990 Farm Act:				
#10 March 1991 *	10.7	.56	53.96	16
#11 July 1991 *	16.5	1.12	59.13	14
Total	360.6	35.60	49.30	19

* Tentative results

Tree Planting Percentage Down

Generally, farmers who offer cropland for CRP enrollment have a choice of conservation covers for their retired acres. Most farmers plant grass, but others, mainly in the Southeast and Delta regions, sometimes choose to plant trees. Both the 1985 and 1990 farm legislation established a goal for tree cover of one-eighth (about 12 percent) of enrolled CRP acres. But tree planting in the first nine signups was barely half of this goal, with only 6 percent of the enrolled acres planted with trees.

The tree planting percentage rose sharply in the 10th signup when 18 percent of the accepted acreage was scheduled to receive trees. In total, 192,000 acres were offered for tree cover and 101,000 (53 percent) accepted.

In the 11th signup, the percentage of accepted acres planted with trees dropped back to 6 percent, primarily because fewer tree acres (124,000) were offered by farmers. Of these, USDA accepted 66,000, or 54 percent.

Useful-Life Easements Affect Acreage Enrolled

A new provision in the 1990 FACT requires that acres enrolled for filter strips, wildlife habitat improvement, salt-tolerant grasses, field windbreaks, grassed waterways, contour grass strips, shelterbelts, and living snow fences be subject to useful-life easements of 15 or 30 years. The easements require the farmer to maintain the practices for their useful life, although CRP rental payments are made for only the first 10 years.

In the 10th signup, 5 percent of the accepted acres was subject to useful-life easements. In the 11th signup, however, less than 2 percent of the accepted acreage involves easements. Farmers offered less than half as many easement acres in the 11th signup as in the 10th.

Resources

Mountain Region Offers Most Acreage—Corn Belt Gets Most in 11th CRP Signup

Region	Offered			Tentatively accepted						
	Bids	Total acres	Tree acres	Bids	Total acres	Tree acres	Conservation priority area acres	Easement acres	Average erosion reduction	Average rental rate
									Tons/acre/yr.	*$/acre/yr.*
Appalachia	1,243	54,678	6,840	861	39,006	3,922	1,626	513	17	54.22
Corn Belt	8,997	484,052	6,873	7,271	385,662	5,655	53,772	2,744	14	79.28
Delta	1,136	90,728	33,585	839	62,257	19,101	0	2,192	9	46.70
Lake States	5,075	257,048	12,032	3,516	176,195	7,629	87,608	3,241	10	58.34
Mountain	1,378	497,232	77	415	117,740	6	0	2,094	14	39.18
Northeast	695	34,340	602	285	12,019	484	9,175	44	7	56.23
Northern Plains	4,202	471,026	1,367	1,361	116,405	1,071	0	2,383	16	49.34
Pacific	399	92,776	337	238	50,349	6	0	2,237	11	55.02
Southeast	1,572	85,702	60,626	860	42,534	27,302	0	2,860	11	43.57
Southern Plains	1,717	264,201	1,295	808	118,586	975	0	824	25	39.95
Total	26,414	2,351,784	123,634	16,454	1,120,754	66,151	152,180	19,132	14	59.13

In addition, for the first time since filterstrip acreage was made eligible for CRP enrollment, none was offered by farmers. Although easement offers are exempt from competition with other CRP offers for acceptance, farmers may feel that a 15- or 30-year easement and the accompanying deed restrictions are too limiting.

Soil Loss Lower, Rental Rates Highest

Annual erosion reductions on land accepted in the 11th signup will average 14 tons per acre, compared with 16.5 tons per acre on average for the 10th signup. Sheet and rill (water-caused) erosion, experienced primarily in the East, will account for 64 percent of the erosion reduction. The remainder of the reduction is in wind erosion, which occurs mainly in the West. While a drop in either form of erosion can improve agricultural productivity, reduction of sheet and rill erosion generally produces greater offsite water quality, recreational, and wildlife benefits.

When farmers offer acres for CRP enrollment, they bid a desired rental payment amount. These rent requests are compared with estimates of the rent that could be earned locally on comparable cropland. Bids that exceed this amount are rejected.

Surviving wellhead and easement offers are automatically accepted. Other surviving offers are ranked, based on a ratio of an environmental benefits index to the cost of the contract. Offers with the highest ratio are accepted. Given the competitive nature of the new bid acceptance process, it would be difficult for farmers to predetermine a rent that will guarantee acceptance.

Annual rental payments received by farmers in the 11th signup will average $59.13 per acre, the highest to date and noticeably higher than the 10th signup's $53.96 average. For the first nine signups, annual rental payments averaged $48.93 per acre. The higher rental rates in the latest two signups reflect the higher cost eastern land entering the Reserve. *(Tim Osborn (202) 219-0403)* AO

Recovery Gathering Strength

The U.S. economy is recovering from the recession that began in July 1990. Although real GNP posted its third consecutive quarterly decline during the second quarter, preliminary estimates show that both employment and production began to rise during this quarter. The recession's trough probably occurred during the second quarter, and recovery will likely continue, with real growth accelerating and job gains increasing. However, the economy is still sluggish, and the pace of the recovery is likely to be uneven, especially in the near term.

Employment, Production Rise but Remain Low

Industrial production reached a trough in March. Through August, production had risen 7.5 percent at an annual rate, much faster than the 1989 rate of 2.6 percent. Despite the recent increases, production levels remain about 2 percent below their recent peak in September 1990.

Factory capacity use has advanced with rising production, but at 78.7 percent for August, capacity continues well below the 83.9-percent average for 1989. Relatively low utilization rates suggest little demand pressure on prices, pointing to continued inflation moderation.

Employment gains have been smaller and less steady than production increases. The number of nonfarm payroll jobs expanded in May, the first increase since July 1990. Job numbers then fell in June and July, recovering again in August to just above their April low. But jobs levels remain 1.2 percent below their July 1990 peak. Unemployment peaked in June at 7 percent, and fell to 6.8 percent in August. By comparison, the unemployment rate averaged 5.2 percent for 1989 and 5.3 percent for the first half of 1990.

Recent job gains have not been evenly spread across industries. Construction, hit hard by the recession, has continued to lose jobs since April. The overall job rise is largely due to increases in the business and health service jobs and in manufacturing jobs.

Incomes Rise, Inflation Pressures Fall

Rising employment helped to generate a second-quarter increase in income of 1.5 percent, according to preliminary statistics. Adjusted for inflation, per capita disposable income had fallen four straight quarters beginning with the first quarter of 1990, the first four-quarter decline in per capita income since 1954. Part of the decline in the second half of last year was due to the sharp runup in oil prices, which reduced the purchasing power of consumer income.

Along with the slight rise in real income in the second quarter, consumer spending in real terms rose 2.8 percent, the fastest growth since the third quarter of 1989. Because consumer spending accounts for about two-thirds of Gross National Product (GNP), its movements are a major determinant of changes in overall economic growth.

Consumer prices rose at an annual rate of about 2.1 percent in the second quarter, down from about 7 percent in the previous 6 months. Through the first 8 months of 1991, consumer price inflation was 2.7 percent annually, well below the 6.1 percent during all of 1990.

Falling energy prices have lowered the overall inflation rate, but this does not account for all of the recent slack in inflation. The rise in the value of the dollar—up about 17 percent from its February low—helped to hold down prices of imported goods.

In addition, higher unemployment and lower rate of capacity use associated with the recession have reduced underlying inflation pressures. For example, excluding food and energy prices, consumer prices rose at about a 3.3-percent annual rate in the second quarter, compared with the 5-percent rise in 1990.

Other price measures also suggest modest inflation. Producer prices for finished goods fell in 6 of the first 8 months of the year. Excluding food and energy prices, crude goods prices fell at a 7.1-percent annual rate in the first 8 months of the year.

Interest Rate Movements Are Mixed

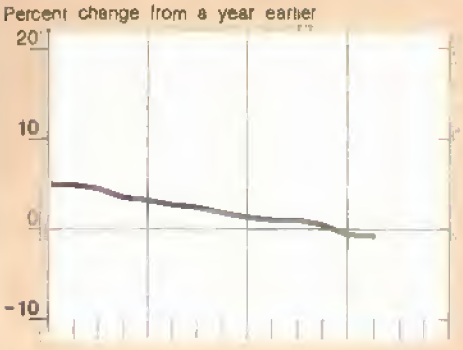
The combination of weak economic activity, slowing inflation, and Federal Reserve policy aimed at mitigating the recession led to substantial declines in interest rates during the first 6 months of the year. Three-month Treasury bill rates, although relatively stable since May at about 5.5 percent, fell about 80 basis points during the early part of the year. (There are 100 basis points in a percentage point.) Short-term rates fell further in August and early September, as inflation continued to be modest and the recovery remained sluggish.

In the early part of the year, long-term rates did not fall with short-term rates, largely because of concern that inflation would accelerate with a strong recovery. Ten-year Treasury yields averaged about 8.1 percent in January and about 8.3 percent in July. Long-term rates fell more sharply in August and September than short-term rates, as inflation continued to slow and the economy appeared weak.

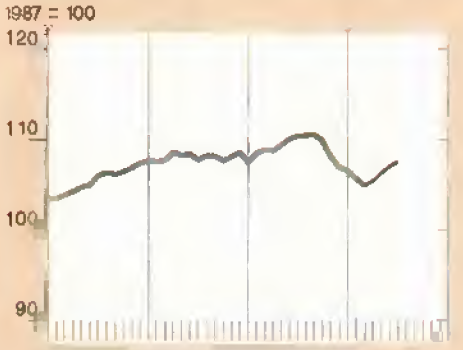
U.S. Economy — General Economic Indicators

Composite leading economic indicators

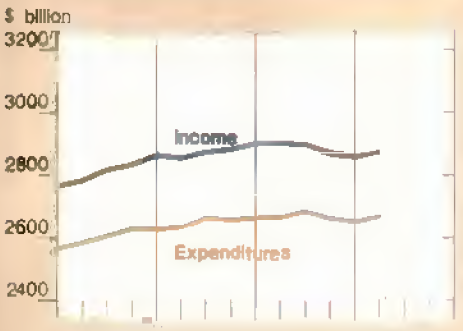
Gross national product



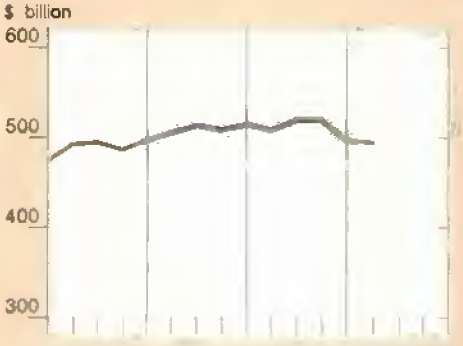
Industrial production



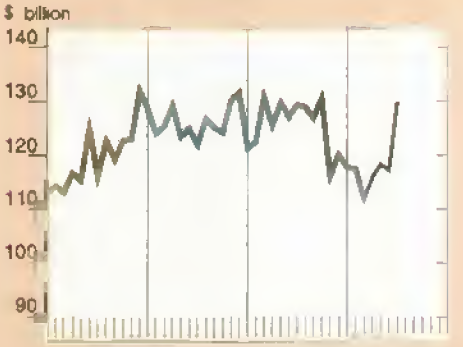
Disposable income and consumption expenditures[1]



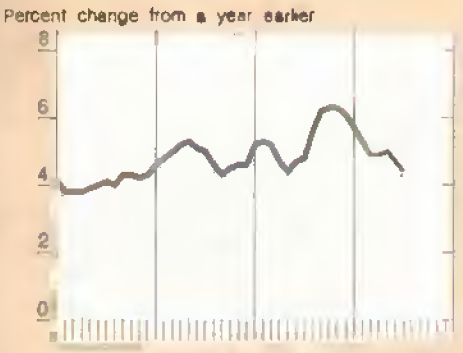
Nonresidential fixed investment[2]



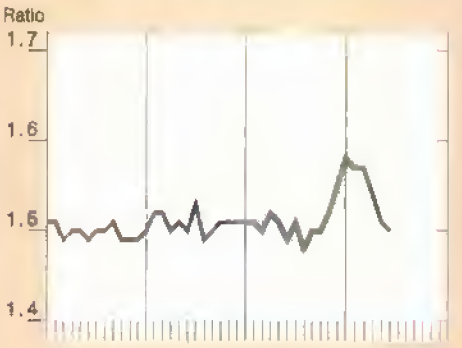
Manufacturers' durable goods orders[2]



Consumer price index

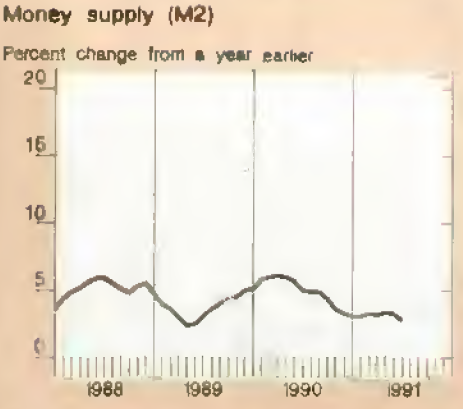


Inventory/sales[3]

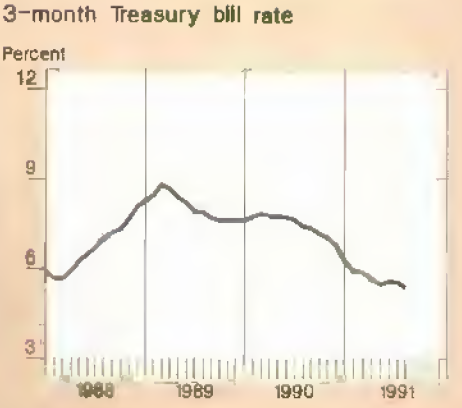


Unemployment rate[4]

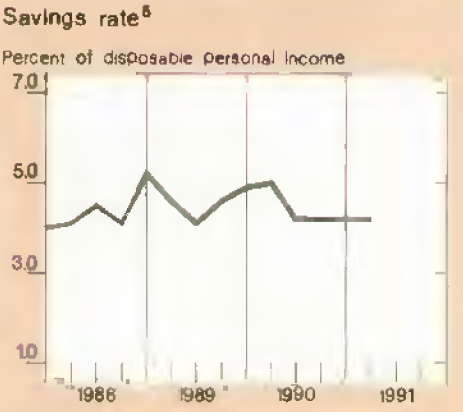
Money supply (M2)



3-month Treasury bill rate



Savings rate[5]



[1]Billions of 1982 dollars, seasonally adjusted at annual rates. [2]Nominal dollars. [3]Manufacturing and trade, seasonally adjusted, based on 1982 dollar. [4]Seasonally adjusted. [5]Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System.

Ten-year rates averaged under 8 percent in August.

Through April, the Federal Reserve pursued a policy aimed at reducing the Federal funds rate (the rate banks charge other banks), triggering declines in other short-term interest rates. In early August, the Fed lowered the target Federal funds rate another 25 basis points to 5.5 percent, and in early September, the Fed reduced the discount rate from 5.5 to 5 percent and the Federal funds rate another 25 basis points. These moves reflected concerns about the sluggish recovery and the relatively slow rate of money growth.

The most closely monitored measure of the money supply, M2, fell in mid-summer and was slightly under the lower bound of the Federal Reserve's target range. The slow rate of money growth—about 2.5 percent at an annual rate from fourth-quarter 1990 through second-quarter 1991—is thought to indicate a continuation of very sluggish real economic activity. However, other explanations associate some of the slowdown in M2 with the closing of thrift institutions whose deposits are part of M2.

Recovery Is Expected To Continue

With the decline in interest rates since the July 1990 business cycle peak, and consumer income and spending beginning to increase, the recovery appears likely to strengthen. Lower interest rates have already sparked an increase in housing starts, which have risen more than 25 percent since their low point in January. Some of the growth in production is expected to be directed at rebuilding inventories, which have been slashed over the last year, falling since the third quarter of 1990.

Exports are likely to continue to contribute to rising GNP. Imports are expected to rise as U.S. demand recovers, which may cause the trade deficit to rise over the next 6 months. World growth appears likely to recover in 1992. Countries such as Canada and the United Kingdom, which experienced recessions in 1990-91, like the U.S., are poised to recover. Germany and Japan are expected to maintain relatively solid growth.

Both the Administration and the Congressional Budget Office (CBO) are forecasting real GNP growth above 3 percent for 1992. In the past, real disposable income has grown at about the same rate as real GNP, suggesting that income will also continue to recover.

Barring an unforeseen jump in oil or food prices, the slack that the recession created in the economy should translate into modest inflation over the next several months. Administration and CBO forecasts put consumer price inflation at around 3.8 percent for 1992.

The outlook for interest rates is mixed. A rebound in real growth and a surge in inventory building is likely to exert upward pressure on short-term interest rates. However, if inflation remains moderate, long-term rates are likely to fall somewhat, even if short-term rates rise with the rebounding economy and short-term credit demands.

Federal Reserve policy will play a key role in the short run, especially in determining short-term interest rates. Should the recovery continue to be sluggish, it appears likely that the Federal Reserve, given its recent policy stance, would act to reduce the Federal funds rate, bringing down other short-term rates.
[R.M. Monaco (202) 219-0782] AO

Special Articles

Lower Fat Foods: New Technology, Increased Demand

Broad consensus among nutrition authorities now exists on the dietary patterns that promote health and reduce the risks of common degenerative diseases. And the primary recommendation for dietary change is to limit the total intake of fats, especially saturated fat. Americans are increasingly aware of the links between diet and health and many are taking steps to reduce their fat intake.

The food industry has responded to consumer demand and marketing opportunities for reduced-fat products by altering fresh meat merchandising practices and by introducing a number of reduced-fat product alternatives. Technological advances in food production and processing have given the food industry new tools, such as protein- or carbohydrate-based fat replacers, that are likely to accelerate the introduction of tasty reduced-fat foods in the future.

Consumers are also getting help with dietary decisions from USDA's Food Safety and Inspection Service (FSIS), and the Food and Drug Administration (FDA), as these agencies work toward new guidelines for food labels.

Dietary Guidelines Agree— Cut the Fat

Beginning in the early 1960's, dietary guidelines began to be widely disseminated to help Americans reduce the risk of certain chronic degenerative diseases. The American Heart Association first advised a reduction in saturated fat consumption in 1961, and in 1963, recommended a reduction in cholesterol consumption. Over the next 25 years, researchers discovered fundamental links between diet and certain chronic diseases.

According to the Diet and Health Committee of the National Research Council (NRC), nutrition authorities in the U.S. and abroad have reached a remarkable degree of agreement on how to eat—and how not to eat—to help prevent disorders such as obesity, coronary heart disease, and cancer.

The NRC's 1989 report on diet and health and the U.S. Surgeon General's 1988 report on nutrition and health provide a comprehensive review of the relationships of dietary patterns and nutrient intake to the risk of certain chronic diseases that affect Americans. Both reports recommend reducing total fat, especially saturated fat, as the dietary change having the largest likely impact on public health.

The NRC report specifies the following targets: limit total fat intake to 30 percent or less of total calories, and saturated fat to less than 10 percent of calories; and, increase carbohydrates to more than 55 percent of total calories by increasing consumption of primarily complex carbohydrates such as vegetables, legumes, breads, and cereals and other starches. The report advises maintaining protein intake at moderate levels.

USDA and the Department of Health and Human Services released the third edition of "Nutrition and Your Health: Dietary Guidelines for Americans" in November 1990. The dietary guidelines are the Federal government's nutritional advice for healthy Americans ages 2 years and older. Children under 2 years of age require more fat for proper growth and development. For the first time, the dietary guidelines suggest numerical limits for total fat and saturated fat intake. These fat limits parallel the recommendations of the NRC. The recommended limits apply to the dietary intake over several days, not to a single meal or food.

Fat Is a Top Concern For Consumers

Consumers have not ignored information about the link between diet and health. In a January 1991 survey conducted by the Food Marketing Institute, fat content topped the list of food shoppers' nutritional concerns.

When respondents were asked about their nutritional concerns and allowed to give unguided responses, fat content was the most frequently cited concern by 42 percent of the respondents,

followed by cholesterol content (37 percent) and salt (22 percent). By comparison, leading concerns among shoppers in 1984 were chemical additives, sugar content, and vitamin and mineral content. Only 8 percent of respondents mentioned fat content in 1984.

FDA survey data on diet and health knowledge from 1983, 1984, and 1988 show a dramatic increase in public perception of the health risks of dietary fat. The surveys found that over the 5-year period, awareness almost doubled among college-educated adults, more than doubled with high-school-educated adults, and nearly tripled among grade-school-educated adults.

However, specific facts such as whether cholesterol-free foods are also low in saturated fats, and whether a particular kind of fat is higher in calories, were not known to most American consumers. Only 20 percent realized that all fat has 9 calories per gram.

Public awareness and consumer concerns have begun to be reflected in total fat consumption. Based on USDA's Nationwide Food Consumption Surveys, fat accounted for about 36 percent of Americans' total energy intake in 1987-88, down from 40 percent in 1977-78.

Over the last decade, Americans have increased consumption of lower fat animal foods—lean cuts of red meat, poultry, fish and shellfish, and lowfat milk. However, use of cream products and cheese, foods generally higher in fat, have also increased. Consumers have cut down on butter, lard, and beef fat, and are using more vegetable oils and shortening. And consumption of grain products, fresh fruits, fruit juices, and fresh and frozen vegetables has steadily risen.

In 1988, fat and oils—for example, butter, margarine, and salad and cooking oils—accounted for almost half the fat in the U.S. food supply and a third of the saturated fat. Red meat, poultry, and fish contributed 32 percent of fat and 40 percent of saturated fat in our diets. And dairy products accounted for 12 percent of total fat consumed and 20 percent of saturated fat.

New Lower Fat Products Introduced

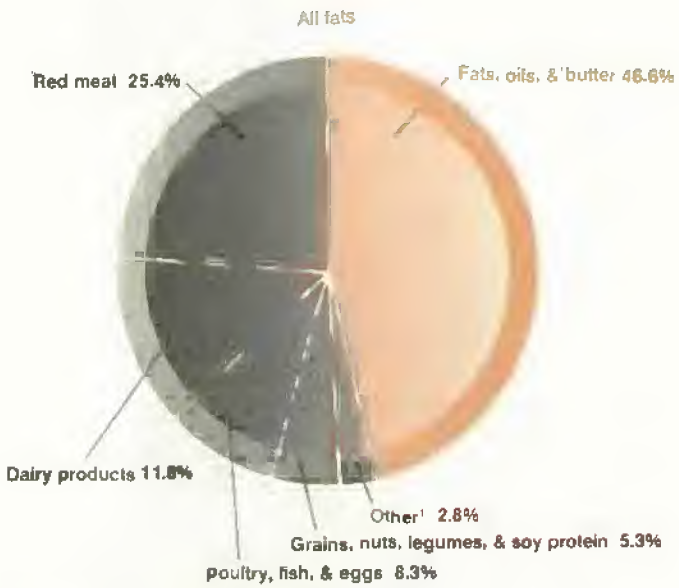
Food companies have responded to consumers' desires for reduced-fat foods. According to *Gorman's New Product News* (GNPN), 10 percent of the 10,301 new products introduced on U.S. store shelves in 1990 were claimed to be low-fat or nonfat products. Among the new dairy products introduced last year, 41 percent were low- or nonfat. And 31 percent of new products in the category of processed and fresh meat, poultry, seafood, and eggs were low- or nonfat products.

FIND/SVP, a private research company, reports that sales of low-cholesterol, low-fat foods in U.S. supermarkets, convenience stores, and other grocery stores amounted to $22.3 billion in 1989. Sales of all food and nonalcoholic beverages in those outlets totaled $218 billion for the year. Low-fat and skim milk, and low-fat yogurts had the largest sales, followed by low-fat/low-cholesterol frozen dinners and entrees. Naturally low-fat or nonfat products such as fruits and vegetables were not included in the study.

Labels That Show the Fat

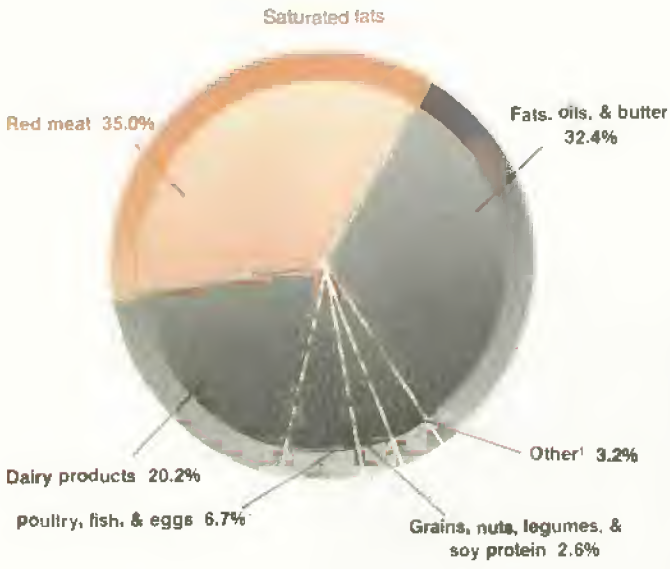
Labeling changes are on the horizon with the recent passage of the Nutrition Labeling and Education Act of 1990 (NLEA) and

While Almost Half of All Fat in the U.S. Food Supply Comes from Fats and Oils. . .



¹Fruit, vegetables, and miscellaneous food products

. . .Red Meat Is the Largest Source of Saturated Fat



Special Articles

Half of New Nonfat or Low-fat Products In 1990 Were Dairy Foods

Food categories	New products 1/ Nonfat or low-fat	Total
	Number	
Baby food	4	31
Bakery products	65	1,239
Baking ingredients 2/	7	307
Beverages, except milk	3	1,143
Breakfast cereals	4	123
Candy, gum, & snacks 3/	39	1,486
Dairy products, including milk	546	1,327
Dessert toppings, pudding, & gelatin	4	49
Entrees 4/	92	753
Fruits & vegetables, excluding potatoes	0	325
Pet food	5	130
Processed fresh meat, poultry, seafood, & eggs	206	663
Salad dressings, oils, sauces, & condiments 5/	39	2,028
Side dishes 6/	3	538
Soups	7	159
Total	1,024	10,301

1/ A new product is any new brand or extension of an existing brand, such as new flavors. New sizes, existing products with new ingredients, private-label products, and hard liquors are not counted. 2/ Flour, mixes, fillings, frostings, bread crumbs, and other baking ingredients. 3/ Includes chips, pretzels, nuts, snack and fruit bars, meat snacks, and hors d'oeuvres. 4/ Prepared entrees and dinners, including dinner mixes. 5/ Includes mayonnaise, jams and jellies, syrups, vinegar, sugar and sweeteners, peanut butter, spices and seasonings, croutons, and nondairy dips. 6/ Potatoes and products, salads, rice dishes, pasta, and stuffing mixes.

Source: *Gorman's New Product News*, 1991.

forthcoming regulations from USDA's FSIS for meat and poultry products (see the July 1991 *AO*). Currently, nutrition labeling is mandatory for FDA-regulated foods (foods other than meat and poultry products) only if a nutrient has been added, or if the manufacturer makes a nutrition claim.

FSIS regulates the labeling and composition of meat and poultry products. Under voluntary nutrition labeling allowed by FSIS, manufacturers are required to provide nutrition information when nutrition claims are made on meat or poultry products. Between 35 and 50 percent of processed, packaged meat and poultry products and nearly 60 percent of FDA-regulated packaged foods carry nutrition labeling.

The NLEA makes nutrition labeling mandatory for all FDA-regulated processed foods. Labels must list the amount of total fat, saturated fat, and cholesterol per serving. The labels must also state the number of calories per serving from total fat. Under the new law, FDA will define descriptors such as "free," "low," "light/lite," and "reduced." Cholesterol claims may not be allowed if the fat or saturated fat content is considered high.

FDA has until November 1992 to issue regulations implementing the NLEA, and food labels must be in compliance by May 1993.

FSIS is working closely with FDA to develop similar nutrition labeling requirements on the same timeline. FSIS intends to establish mandatory requirements for processed products and to issue voluntary guidelines for providing nutrition information on major retail cuts of fresh meat and poultry.

Mandatory disclosure of the amount of fat in processed foods will increase the information available to consumers and allow them to compare types of foods and different brands of the same product. Also, manufacturers will be prohibited from using certain descriptors and claims unless their products meet government-established nutritional requirements.

Recent concern has also focused on fat-free claims made in percentage terms. A food labeled as 96-percent fat free is 4-percent fat by weight. But this does not tell consumers how many grams of fat are in the product, or the percent of total calories from fat. Responding to FDA's concerns that these kinds of labels are misleading for foods whose calories come largely from fat, Kraft General Foods recently announced it will drop these claims from some of its products, including cottage cheese, sherbet, and yogurt.

Standards of Identity: Protection or Obstacle?

Federal regulatory changes may be in the wings for standards of identity as well. Standards of identity require foods that do not conform to the official recipe to be clearly labeled. The Food, Drug, and Cosmetic Act of 1938 established these quality standards to prevent foods known by a traditional name from being debased by the substitution of inferior ingredients.

There are roughly 288 standards of identity covering a variety of FDA-regulated foods. Many of these standards specify minimum fat content or a range of allowable fat levels such as the standards for milk, cream, sour cream, yogurt, natural and processed cheeses, ice cream, chocolate and chocolate products, peanut butter, margarine, mayonnaise, and salad dressing.

FSIS has established regulatory or policy standards of identity and composition for over 250 processed meat or poultry products that use traditional names, such as "hot dog" or "beef chili." Almost all of these standards specify minimum amounts of meat and poultry required for products using these traditional names. A manufacturer wanting to offer a lower fat beef chili, for example, must use leaner beef or reduce other fat-containing ingredients, but cannot reduce the amount of meat in the chili.

Although standards of identity are intended to safeguard the integrity of foods, they may inadvertently limit product development. Despite advances in food technology and nutrition

knowledge, certain attributes, such as fat content, are "locked in" by the standards.

For example, a product containing less fat than mayonnaise may need to be called a "mayonnaise substitute." Similarly, an ice cream-type product containing less than 10 percent milkfat could not be called ice cream. Manufacturers may be reluctant to develop new product formulations and market a "mayonnaise substitute" or a "dairy dessert," because of uncertainty about public acceptance, thus limiting consumer choice of lower fat alternatives.

The NLEA streamlined the cumbersome regulatory process for establishing and amending FDA standards of identity, except for changes or repeal of standards for dairy products and maple syrup. These were exempted from the law.

Trade and consumer groups, such as the International Ice Cream Association and the Public Voice for Food and Health Policy, have petitioned FDA to amend the standard for ice milk to change the name of the product to "reduced-fat ice cream" and to establish standards of identity for "low-fat ice cream" and "nonfat ice cream." The Public Voice for Food and Health Policy also requested that the maximum milkfat content for ice milk be lowered from 7 to 5 percent. FDA is reviewing comments from the public on whether these changes would be in the best interest of consumers.

USDA has already taken action to promote the marketing of lower fat ground beef and hamburger products by permitting descriptive labeling of products which contain fat replacers such as oat bran or carageenan. Traditionally, the names "hamburger" or "ground beef" could not be used on products that contained added ingredients.

Cutting the Fat, Keeping the Taste

One obstacle to offering foods lower in fat is that reducing the fat often means sacrificing taste. Fat adds flavor to many foods, such as meats and dairy products.

Some manufacturers have been able to offer a satisfactory alternative by reformulating their products using nonfat ingredients. Kraft General Foods, owner of Entenmann's Inc., a bakery products firm, applies new processing techniques to produce fat-free bakery products using skim milk and egg whites. Some manufacturers reduce the fat content of fried products by par-frying to develop crispness and color, and finishing in an oven to minimize fat absorption. Others incorporate film-forming cellulose into their products to reduce fat absorption and retain moisture.

Producers of other low-fat foods are less successful in replicating the taste and creaminess of their traditional counterparts. Many consumers do not view ice milk as a satisfactory alternative to ice cream. Some imitation margarines separate at room temperature and when heated. Thus, food companies and ingredient manufacturers have been devoting considerable resources to develop fat substitutes that allow the lower fat products to taste and function like traditional high-fat foods.

Carbohydrate-based ingredients, such as maltodextrins, cellulose gels, and hydrolyzed corn starches, comprise one group of fat substitutes. These ingredients are mixed with water and/or gums and emulsifiers, depending on the target foods. Companies such as Grain Processing Corporation, FMC Corporation, and A.E. Staley Manufacturing Company sell these substitutes for use in low-calorie dips, salad dressings, ice cream-type products, and baked goods.

Another group of fat substitutes uses protein and water compounds to mimic the texture of fat in foods. Simplesse, developed by the NutraSweet Company, is made from egg whites and skim milk, or from whey, depending on the target food. The proteins are heated and blended with water into tiny round particles that create the taste and texture of fat. Simplesse cannot be used to cook foods, however, because heat causes the protein to gel and lose its creaminess.

FDA approved the skim milk and egg white version of Simplesse for use in frozen desserts in February 1990. Last summer NutraSweet began selling Simple Pleasures—an ice cream-type product containing Simplesse. A 4-ounce serving of Simple Pleasures has less than 1 gram of fat, versus about 12-15 grams for superpremium (high-fat) ice creams, and about half the calories.

NutraSweet recently obtained FDA approval to use Simplesse made from whey protein concentrate in a variety of foods such as salad dressings, mayonnaise, and reduced-fat cheeses. Kraft General Foods has petitioned FDA to use its new protein-based substitute, Trailblazer, in frozen desserts.

Food technologists have been able to alter fatty acids chemically to provide fewer or no calories (fatty acids are the chemical components of fat). One group of chemically altered fatty acids, polyglycerol esters, has 6 to 6.5 calories per gram, about one-third less than fat. They are used in low-calorie versions of shortenings and bakery items and imitation ice creams, margarines, and peanut butters.

The Procter & Gamble Company recently petitioned FDA for approval of their low-calorie fat substitute, caprenin, to replace cocoa butter in soft candies and confectionery coatings. Caprenin, formally known as caprocaprylobehenin, has only 5 calories per gram, compared with cocoa butter's 9 calories. The calorie reduction occurs because the behenic acid portion of the compound is only partially absorbed by the body.

Olestra, another fatty acid-based substitute developed by Procter & Gamble, has been under FDA review since 1987. The company claims that olestra functions and tastes like fat but passes through the body unabsorbed. Snack foods fried in olestra could be marketed as fat-free. The firm has asked FDA for permission to use 100-percent olestra in fried snack foods like potato chips, corn chips, and cheese puffs.

Other companies, such as ARCO Chemical Company, Unilever, CPC International, and Frito-Lay, are developing their own fatty acid-based substitutes.

Lower fat foods are not confined to supermarket shelves. Restaurants, fast-food establishments, and school cafeterias are offering low-fat fare. Salad bars, lowfat frozen yogurt, and "heart healthy" entrees are featured in many eating places. Fast-food outlets are trying to lure customers from competitors by promoting lower fat offerings such as skinless fried chicken, salads, and reduced-fat burgers.

USDA continues to promote the reduction of fat, sugar, and salt in school meals and other USDA food distribution programs. USDA-donated commodities include low-fat ground turkey, tuna packed in water, unsalted peanuts, and part-skim milk mozzarella cheese. USDA also provides recipes and cooking instructions designed to reduce added salt, sugar, and fat.

In USDA-funded demonstration projects, food service workers have modified elementary school meals by substituting ground turkey for beef in spaghetti sauce and tacos, using yogurt instead of mayonnaise in salad dressings, purchasing hot dogs and bacon containing less fat and sodium, and offering skim chocolate milk.

Competitive pressures to offer truly lower fat products may lead manufacturers to scramble to reduce the fat in their products through reformulations or the use of fat substitutes. Changes in standards of identity to allow lower fat levels in traditionally named foods may also expand the offerings of reduced-fat products.

Demand for low-fat foods is likely to continue growing as Americans increase their nutrition knowledge and as labels carry greater and more useful nutrition information. The increased demand will present challenges and opportunities for the food industry to produce and promote reduced-fat foods. *[Rosanna Mentzer Morrison (202) 219-0864 and Judy Putnam (202) 219-0870]* AO

The U.S. Farm Sector In Review

The three articles that follow look at the U.S. farm sector as a whole as well as two special groups of farms: the mid-sized farms most often associated with the image of a family farm, and farms that do not rely on direct government payments for their operation.

In the first article, trends since the mid-1970's are briefly reviewed. The next article contrasts characteristics of mid-sized farms having sales between $50,000 and $250,000 with characteristics of all farms. The last article looks at the two-thirds of all U.S. farms that receive no direct government payments. Nonrecipient farms are markedly different in many ways from farms that receive payments.

Trends Since the Mid-Seventies

During the past two decades, several forces combined to produce a "boom and bust" cycle in the U.S. farm economy. The 1970's was generally a time of optimism for U.S. agriculture, fueled by strong worldwide demand for U.S. farm products that kept farm prices high and boosted incomes.

At the same time, chronic inflation led to low or negative real interest rates, encouraging investors to search for assets that

would retain their real value during inflationary times. Farmland seemed a good investment; money flowed into the sector, financing land and machinery for farmers expanding operations or getting started.

Reversing a trend that accelerated in the 1950's and 1960's, farm numbers actually increased slightly during this period, as entry of new farmers grew in response to favorable economic conditions. Many of the new entrants were young farmers born during the baby-boom years of the 1950's. At the same time, there was a slower secular movement of labor out of farming, caused by long-term trends in mechanization and technology. Agricultural land values rose rapidly, often encouraging more borrowing by farmers.

The economic climate changed abruptly in the early 1980's. Restrictive monetary policy brought inflation down but resulted in much higher real interest rates. This raised the cost of borrowing for farmers and increased the attractiveness of investments in nonfarm interest-bearing assets. Simultaneously, a higher-valued dollar, reduced demand, and greater competition overseas shrank U.S. farm exports.

The rate of decline in farm numbers accelerated again during the 1980's, as the farm recession strained the financial status of many farmers. Farm numbers, however, did not decline as rapidly as they had in the 1950's and 1960's. The rate of decline was 4 percent in the 1950's and 3 percent in the 1960's, but only 1 percent in the 1980's.

Information is limited on how many farmers voluntarily left and how many were forced out during the financially stressed 1980's. But evidence suggests that about half of those who left did so because of financial stress. The decline in farm numbers was also due to reduced entry into farming, as conditions in the sector made farming financially unattractive.

A Multi-Industry Farm Sector

In a sense, the farm sector is a combination of many different industries. Commercial agriculture in the U.S. is specialized along commodity lines, each commodity a subsector with its own features.

For example, the cash grain subsector is comprised mostly of full-time farmers who independently operate moderate-sized farms, buying inputs and selling their products on the market. Their economic returns are significantly influenced by government programs that provide price and income support. The latest data available from the 1987 Census of Agriculture show approximately a half million farms considered as cash grain operations.

Beef cattle farms, excluding feedlots, tend to be small, part-time operations, on land considered generally unsuitable for crop production. According to census data, most operators work full-time off the farm; 85 percent of beef cattle farms generated less than $25,000 in annual sales. With roughly 650,000 operations, these small cattle farms account for a large part of total U.S. cattle production.

The poultry industry, on the other hand, represents large-scale, vertically integrated agriculture. Of all the U.S. commodity subsectors, the poultry industry most closely represents an industry structure similar to that of nonfarm manufacturing. The 1987 census recorded 38,000 poultry operations in the U.S. Production through marketing processes are highly coordinated, and poultry farmers generally produce under contracts with large processors.

Off-Farm Earnings Close the Income Gap

One of the most significant changes since the mid-1970's has been the substantial increase in off-farm work by farm operators. The proportion of farm operators whose principal occupation was something other than farming rose from 37 to 46 percent during 1974-87.

Off-farm work now provides over half of farm operator household income, and regularly exceeds net farm income. This trend, and its substantial contribution to sector income, is likely to continue, mainly because of changes in the underlying profile of farming.

While farm household income fluctuates, the average income of farm operator households is on a par with all U.S. households. However, the income distributions and net worth of these households are quite different.

Farm operator households have a higher proportion of both high- and low-income households than for the nation as a whole. And median farm operator household net worth in 1988 was over $167,000—almost 5 times the average U.S. household, which had a net worth of just under $36,000.

Greater wealth of farm households is explained in part by the capital-intensive nature of today's farming. The farm household and the farm business ledgers are the same. A composite profile developed from 1988 data shows that, to generate net business income comparable to the average U.S. household income, a farm business needs assets totaling about three-quarters of a million dollars.

Larger Farms, Smaller Firms

The trend toward fewer but larger farms over the past two decades often raises concerns about the survival of the traditional family-owned-and-operated farm. But throughout this period, the proportion of farms operated as sole proprietorships actually has remained constant. And despite a moderate increase in the share of corporate farms, these are predominantly

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family-held corporations. The share of farms and production accounted for by nonfamily corporations remained unchanged through the turbulent 1970's and 1980's.

When compared with nonfarm businesses in the American economy, farms are generally much smaller. Even the largest of farms are tiny by the standards of the average U.S. corporation.

Farms also appear to be earning returns comparable with those of other small businesses. The average assets required for farm operations to earn reasonable incomes are comparable with those needed by small firms in most other industries, but are less than for other real-estate based industries. U.S. agriculture remains a predominantly "small business" industry, comprised of numerous small firms, each playing a direct but small role in the economy. *[Donn Reimund (202) 219-0522]*

In Search of the Family Farm: Characteristics of Mid-Sized Farms

A dualistic distribution is emerging in agriculture, revealing growth in the number of small and large farms and decline in the number of mid-sized farms. The disappearing middle of the farm-size distribution is often associated with the demise of the family farm. A common concern is that the dwindling number of mid-sized family farms implies a loss of middle-class independent producers who sustain community institutions, and a subsequent decline in community well-being.

Although much has been written about the family farm, a universal definition is lacking. Some definitions would encompass almost every farm. For example, one description of a family farm is an operation in which most decisions are made by family members actively engaged in the farm operation. This definition would include every type of farm but estates and nonfamily corporations, which make up less than 1 percent of all farms.

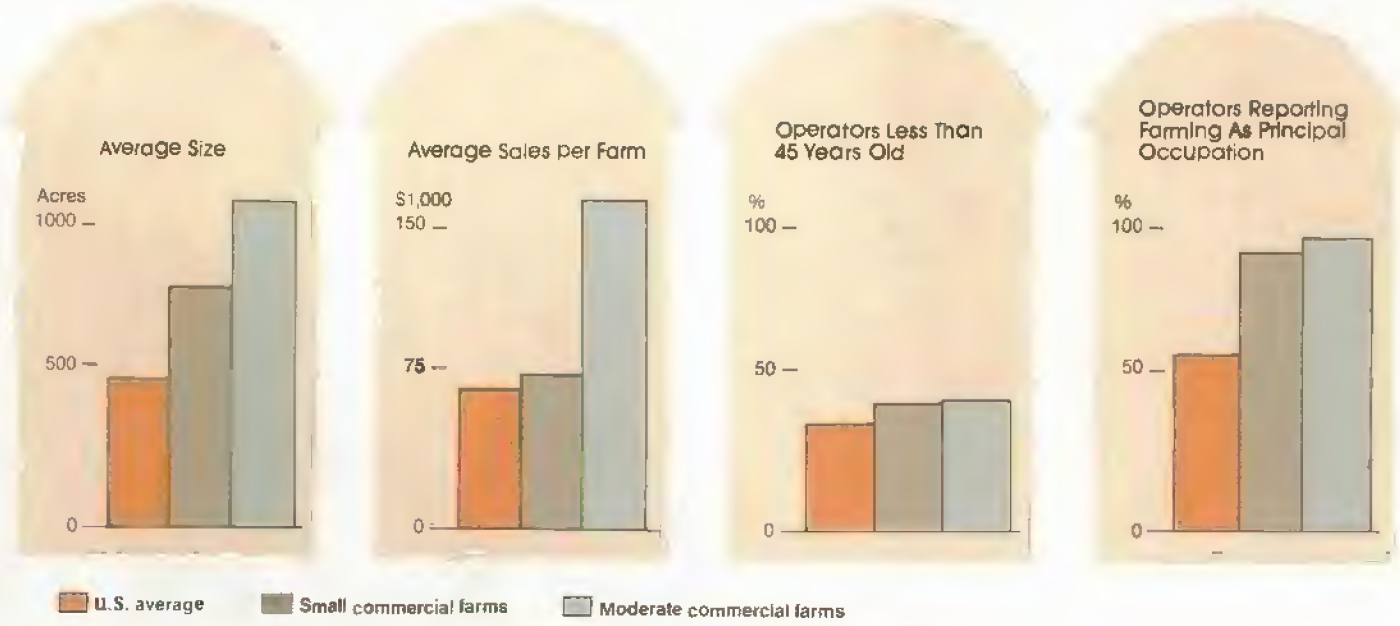
Since it is mid-sized farms that many consider to be family farms, this article looks at two groups of mid-sized farms defined as: 1) small commercial farms with annual sales of $50,000-$99,999; and 2) moderate-sized commercial farms with annual sales of $100,000-$249,999. These sales amounts may seem large, but they generate returns that are much smaller—about $17,000 for the small commercial farms and $40,000 for the moderate-sized farms.

By this definition based on sales class, the mid-sized family farm differs considerably from the average U.S. farm—in size, ownership, age of operator, source of income, and net returns.

The decline in farm numbers reflects the turbulence in the farm economy since the late 1970's. And the changes in mid-sized farm numbers are a good barometer for observing the boom-and-bust cycle that affected agriculture over this period.

During the relatively prosperous period of 1978-82, the number of farms nationwide fell by less than 1 percent and small commercial farms by 4 percent. But the number of moderate commercial farms grew by 30 percent. Then, during the financially stressed period of 1982-87, the decline in the number of all farms was 6.8 percent. In that period the number of small

Mid-Sized Farms Are Larger, Have Younger and More Full-Time Operators Than Average U.S. Farm



Mid-Sized Farms Are Larger Than Average, With Higher Sales per Farm

Characteristic	Small commercial	Moderate commercial	All farms
Farms (1,000)	218.1	202 6	2,087.8
Share of total (percent)	10.4	9.7	100
Land in farms (million acres)	161.9	225.0	964 5
Average size (acres)	743	1,111	462
		Dollars	
Value of land & buildings:			
Per farm	403,407	644,693	289,387
Per acre	546	572	627
Sales:			
Per farm	71,825	153,929	65,165
Per acre	96.71	138.55	141.06
Expenses'			
Per farm	54,241	113,296	51,797
Per acre	73.22	99.82	112.12
Net returns/acre 1/	23.48	38.72	28.94
		Percent	
Ownership:			
Full owner	32.6	27.0	59.3
Part owner	49.9	58.1	29.2
Tenant	17.5	14.9	11.5
Organization:			
Sole proprietor	83.5	73.2	86.7
Partner	12	15.6	9.6
Other 2/	4.0	7.7	3.2
Principal occupation:			
Farming	87.1	91.9	54.5
Other	12.9	8.1	45.5
Off-farm work:			
None	64.0	73.1	43.1
Any	36.0	26.9	56.9
Age of operator.			
Under 25	2.2	1 4	1.7
25-44	37.8	40.1	31.3
45-59	34.5	37.8	33.7
60 or more	25.5	20.8	33.4

1/ Returns are calculated as sales less expenses. 2/ Family and other corporations.

commercial farms fell at twice the national rate—13.3 percent—and the number of moderate farms declined by 6 percent.

While their numbers have fallen, mid-sized farms remain a significant part of American agriculture. According to the 1987 Census of Agriculture, mid-sized farms accounted for 20 percent of all farms, 40 percent of all land in farms, and 34 percent of the total value of farm product sales. These farms made up 65 percent of all cash grain farms, 50 percent of the nation's livestock farms, and 42 percent of the dairy farms.

Mid-Sized Farms Deviate From the Average

More than half the mid-sized farm operators are part-owners of their land, and mid-sized farms also have a higher proportion of tenants than the national average. Only 30 percent of mid-sized farm operators are full owners, compared with almost 60 percent for all farms. There are more partnerships and family corporations among mid-sized farms than for all farms, but over three-fourths of the farms are still sole proprietorships.

Part owner doesn't signal more off-farm employment, however. The vast majority of mid-sized farm operators—almost 90 percent—report farming as their principal occupation, and only a third of all mid-sized operators report some off-farm work. Nationwide, only about half of farm operators report farming as their principal occupation, and well over half report some off-farm work. Without the stability provided by off-farm income, mid-sized farm operators are in a relatively more vulnerable financial position.

Mid-sized farms are larger, generate higher sales per farm, have a higher per-farm value of land and buildings, and are operated by younger individuals than the national average. The small

commercial farms are 60 percent larger, and the moderate commercial farms 140 percent larger than the average-sized farm.

The decline in the number of mid-sized farms may be partly explained by the combination of their size and the lack of off-farm income. These farms are too large to operate on a part-time basis, yet typically do not generate enough net income to cover family living expenses. This is especially true for the small commercial farms, whose numbers declined the most from 1978 to 1987.

While the reported average sales per farm for the nation in 1987 was around $65,000, mid-sized farms had a combined average sales per farm of more than $111,000. But per acre, these farms generated lower sales than the national average. Average sales per acre for the nation amounted to $141; small commercial farms reported only $97 in sales per acre, and moderate farms $138.

One explanation for the lower per-acre sales is that mid-sized farms are less productive than the national average, generating smaller output per acre. But another explanation involves the type of output. Mid-sized farms are predominantly cash grain operations. So the lower sales per acre may be because the national average includes sales from higher value commodities.

Program Payments Important To Mid-Sized Farms

Both small and moderate commercial farms have relatively high rates of participation in government farm programs, primarily due to the prevalence of cash grains as their major product. Nationwide, about one-third of all farms participate in government programs, but almost two-thirds of mid-sized farms participate.

Mid-sized farms also account for over half of all farms that receive Commodity Credit Corporation (CCC) loans. Small and moderate commercial farms make up more than half the participants in each commodity eligible for CCC loans except peanuts.

Over two-thirds of mid-sized farms are located in the traditional farm regions—the Plains, Lake States, and Corn Belt. Their production is concentrated in cash grains, livestock other than dairy and poultry, and dairy. About a third specialize in cash grains, a fourth in livestock, and a fifth in dairy.

Small commercial farms may be a more transitional size than the moderate commercial farms, because average net cash returns are typically not high enough to support family living expenses, yet these farms are too large to operate on a part-time basis. But, while their numbers have declined over time, they remain a vital part of American agriculture. *[Nora Brooks (202) 219-0524]*

Farms Without Program Payments

The vast majority of U.S. farms received no direct payments in either 1987 or 1988. These farms—roughly two-thirds of all farms—either did not participate in farm programs or produce the commodities for which payments are made. They accounted for about half of all land in farms and one-half of farm product sales in 1987.

The distribution of payments has been an important issue in agricultural policymaking since the beginning of farm programs. Concern has focused primarily on the total income of all farms and the welfare of program participants. But little attention has been given to farms that do not receive payments or participate in subsidy programs.

For the first time, data are available from the Census of Agriculture showing direct payments and farms without payments for 1987 and 1988. The data indicate significant distinctions between farms that do not receive direct payments and those that do.

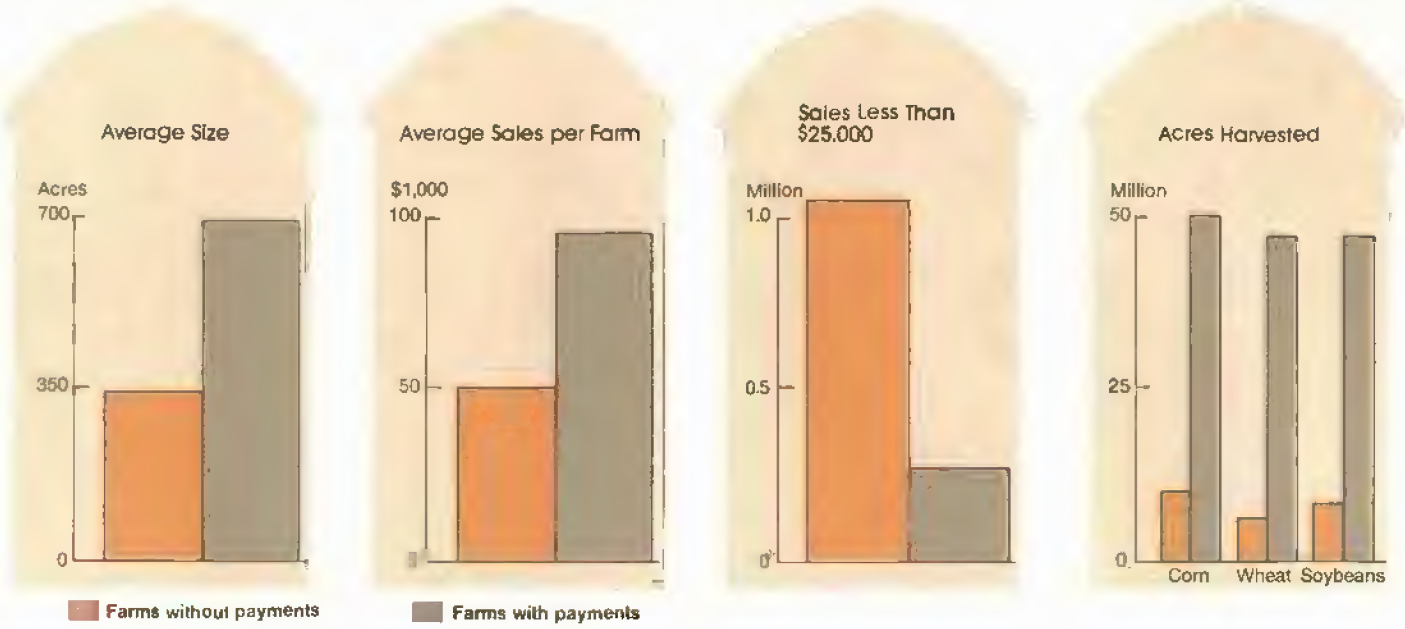
Data Sources

The 1987 Census of Agriculture is the first agricultural census to publish information specifically on farms receiving payments. The data on farms receiving payments are presented in Volume 2, Part 5, *Government Payments and Market Value of Agricultural Products Sold.* Information on farms not receiving payments can be derived by subtracting the data for those receiving payments from the total for all farms counted in the census.

The Census of Agriculture is conducted every 5 years by the Bureau of the Census in the U.S. Department of Commerce. The census defines a farm as any place from which $1,000 or more of agricultural products were sold or normally would have been sold during the year of the census. Government payments were not counted toward the $1,000 minimum size.

In addition to the Census of Agriculture, the Census Bureau conducted the Agricultural Economics and Land Ownership Survey (AELOS) in 1989. This sample survey is the other data source used in this report, and provides calendar year 1988 data. The survey is based on a sample of 44,125 farm operators. Data for 1988 show 171,000 fewer farms in 1988 than in 1987. Most of the decline was among farms of fewer than 50 acres.

Farms Without Payments Are Smaller in Area, Sales, and Acres Harvested



Direct payments include both cash subsidies and the value of commodities paid in kind by the government. Cash subsidies include deficiency payments, paid diversions, disaster assistance, and the payments made under the dairy termination program.

This article considers only direct payments. Although direct payments make up a significant share of total assistance provided to farmers, they do not include all forms of assistance. The value of price support is not included, nor are export promotion and assistance programs, or other forms of indirect support such as marketing agreements or subsidized irrigation.

Farmers who participated in USDA programs in 1987 received over $16.7 billion in direct payments. Of that amount, $9.6 billion went to some 700,000 producers who reported direct payments to the Census of Agriculture. The remaining $7.1 billion went to farm landlords, operators' partners, and corporation stockholders. Some underreporting is also likely.

Which Are the Farms Without Payments?

About 1.4 million farms reported no payments received from the Federal government in 1987 or 1988. In general, these farms:

- were very small or very large, measured by sales volume;
- usually produced few program commodities (those typically eligible for direct payments);
- were small in acreage;
- had low cash farm income, although a few had very large incomes; and
- earned a large share of their total income off the farm.

Farms Not Receiving Payments in 1987 Were Generally Small

Item	Farms receiving payments	Farms not receiving payments*
All farms:		
Number	699,010	1,388,749
Percent	33	67
Land in farms:		
Million acres	483.0	481.4
Total sales:		
Billion dollars	66.1	69.9
Percent	48	52
Average size:		
Acres	691	346
Sales per farm ($)	94,630	50,333
	Number	
Farms with sales of:		
Less than $25,000	264,211	1,090,141
$25,000-$99,999	252,426	185,260
$100,000-$499,999	168,242	95,456
$500,000 or more	14,131	17,892

*Number of farms without payments may not match among tables since numbers are estimates based on expansions of survey data.
Source: 1987 Census of Agriculture, Vol. 2, Part 5.

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Land on farms not receiving payments in 1987 totaled about 50 percent of the land in farms, or 481.4 million acres. The average farm size was 346 acres, considerably smaller than the 691-acre average of farms that received payments.

Farms without payments had total sales of nearly $70 billion, or about $50,333 per farm. But more than three-quarters of these farms—about 1.1 million—had less than $25,000 of sales per farm. By today's standards, these are relatively small businesses that would not provide sufficient net income to be a family's sole economic activity.

Of the 700,000 farms in the U.S. with sales between $25,000 and $99,999 in 1987, 40 percent received no payments. Among the very largest farms in the U.S.—some 32,000 farms with sales in excess of $500,000—well over half reported no payments. Many of these large farms produced high-value commodities such as fruits, vegetables, or livestock, and did not rely on commodities eligible for direct payments for a primary source of income.

Off-Farm Income More Important to Nonrecipients

Off-farm employment was very important for farmers who did not receive payments. Most of these farmers held a nonfarm job as their primary occupation. Of the 1.4 million farmers who did not receive payments in 1987, nearly 800,000 had a primary occupation other than farming. Almost half of these operators worked off the farm 200 days or more.

Average and total off-farm income was higher for farms that did not receive payments than for those that did. In 1988, nearly $42 billion in off-farm income was reported by all farms, but nearly $30 billion went to farms without payments, for an average of $34,000 per farm. Farms that did receive payments in 1988 but also reported off-farm income earned an average of $23,000 per farm.

The bulk of nonfarm income received by all farmers, whether or not they received payments, was in cash wages. Half the farms not receiving payments received cash wages for off-farm work, a third received interest on investments, a quarter had retirement income, and a tenth were self-employed in nonfarm activities.

Almost Half of Nonrecipients Showed Losses

About 49 percent of the farms that reported no payments in 1987 also reported losses averaging $5,113 per farm. The remainder reported positive net cash gains from farming of nearly $23,000 on average. Among all 2.1 million U.S. farms in 1987, 1.3 million reported net gains—and over 55 percent of those farms received no payments. Among 800,000 U.S. farms reporting net losses, 85 percent were farms that received no payments.

The cash returns for farms that did not receive payments were relatively small. These farms averaged about half the cash returns reported by farms that did receive payments. Only a handful of the farms with no payments, 61,073 farms, reported gains above $50,000. In contrast, nearly 150,000 farms that received payments reported net gains in excess of $50,000.

Most Nonrecipients Not Eligible for Payments

Producers of some commodities do not have the opportunity to receive payments. Fruits, nuts, berries, and nursery and greenhouse products, as well as livestock and dairy, are not eligible for direct payments, although prices for some of these, like dairy, are supported through other programs.

Over 90 percent of the farms raising fruits, nuts, berries, and nursery and greenhouse products in 1987 did not receive direct payments, although many received indirect assistance, such as subsidized irrigation. At the other end of the distribution, only 13 percent of all cotton farms and 29 percent of all grain farms did not receive payments in 1987. And except for hog farms, which typically raise some grain crops, the majority of livestock farms did not receive direct payments.

Nearly Half of Farms Without Payments Had Losses

Item	Farms receiving payments	Farms not receiving payments*
All farms	700,600	1,387,150
Average net gain	$33,146	$9,255
Farms with net gain	577,523	713,793
Average net gain	$41,861	$22,808
Farms with gain of:		
Less than $1,000	23,878	137,725
$1,000-$9,999	155,938	345,005
$10,000-$49,999	249,810	169,990
$50,000 or more	147,897	61,073
Farms with net loss	123,077	673,357
Average net loss	$7,747	$5,113
Farms with loss of:		
Less than $1,000	21,848	161,065
$1,000-$9,999	76,803	442,130
$10,000-$49,999	22,566	65,974
$50,000 or more	1,860	4,188

*Number of farms receiving and not receiving payments may not match exactly among tables since numbers are estimates based on expansions of survey data.

Source: 1987 Census of Agriculture, Vol. 2, Part 5.

The Share of Farms Not Receiving Payments Varied Sharply Among Specialties

Specialty	Nonrecipient farms: Share of farms	Nonrecipient farms: Share of sales
	Percent	
All farms	67	51
Nursery and greenhouse	94	96
Fruits, nuts, and berries	92	91
Poultry	79	87
Tobacco	77	49
Vegetables	69	71
Cattle and calves	69	57
Hay and silage	61	47
Dairy	60	61
Sheep and lambs	58	52
Hogs and pigs	49	33
Grains	29	12
Cotton and cottonseed	13	13
Other crops	44	42
Other livestock	85	91

Source: 1987 Census of Agriculture.

Data for 1988 show 171,000 fewer U.S. farms than in 1987—1.9 million compared with nearly 2.1 million. Of the 1.9 million farms in 1988, 1.2 million reported no payments. These farms earned about $9.7 billion in net income—less than a third of the total net income reported by all farms in 1988. A sizable number of these farms, over 400,000, had 50 acres or less; and over half of the farms reporting no payments in 1988 had fewer than 100 acres.

Most program commodity acreage is not located on farms that report no payments. Of the 59 million acres of corn harvested for grain in 1987, for example, only 9 million acres were on farms that did not participate in farm programs. Only 6 million of 53 million wheat acres and 8 million out of 55 million soybean acres were on farms without payments. By contrast, 4 out of every 5 acres of orchard were harvested on farms that did not receive payments. *[Bob Reinsel (202) 219-0688]* AO

Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1989	1990	1991					1992	
	Annual	Annual	I	II	III F	IV F	Annual F	I F	Annual F
Prices received by farmers (1977=100)	147	150	146	152	143	142	146	142	—
Livestock & products	160	170	167	165	161	161	164	158	—
Crops	134	128	124	138	124	123	127	126	—
Prices paid by farmers, (1977=100)									
Production items	165	171	173	175	173	—	171	—	—
Commodities & services, interest, taxes, & wages	178	184	188	190	189	—	187	—	—
Cash receipts ($ bil.) 1/	160	169	162	171	174	167	166–171	—	—
Livestock ($ bil.)	84	90	87	84	87	90	85–89	—	—
Crops ($ bil.)	76	79	75	87	87	77	79–83	—	—
Market basket (1982–84=100)									
Retail cost	125	134	137	139	—	—	—	—	—
Farm value	107	114	109	109	—	—	—	—	—
Spread	134	144	153	154	—	—	—	—	—
Farm value/retail cost (%)	30	30	29	28	—	—	—	—	—
Retail prices (1982–84=100)									
Food	125	132	136	137	—	—	135–139	—	—
At home	124	132	136	137	—	—	135–137	—	—
Away from home	127	133	136	137	—	—	138–141	—	—
Agricultural exports ($ bil.) 2/	39.7	40.1	11.3	8.8	8.4	—	37.5	—	—
Agricultural imports ($ bil.) 2/	21.5	22.5	5.8	5.5	5.3	—	22.5	—	—
Commercial production									
Red meat (mil. lb.)	39,418	38,608	9,465	9,635	10,054	10,342	39,496	9,792	40,382
Poultry (mil. lb.)	22,039	23,635	5,837	6,296	6,310	8,330	24,773	6,100	25,735
Eggs (mil. doz.)	5,598	5,660	1,418	1,417	1,440	1,455	5,729	1,430	5,745
Milk (bil. lb.)	144.3	148.3	37.5	38.6	36.1	35.8	148.0	37.4	148.6
Consumption, per capita *									
Red meat and poultry (lb.)	210.4	210.8	50.9	53.2	54.7	57.0	215.8	—	—
Corn beginning stocks (mil. bu.) 3/	4,259.1	1,930.4	1,344.5	6,940.3	4,789.0	2,991.9	1,344.5	1,530.0	—
Corn use (mil. bu.) 3/	7,260.1	8,113.4	2,338.1	2,151.6	1,798.3	1,461.9	7,750.0	—	7,725.0
Prices 4/									
Choice steers—Neb. Direct **	73.86	78.56	80.09	77.92	69–70	71–77	74–76	73–79	73–79
Barrows & gilts—7 mkts. ($/cwt)	44.03	54.45	51.50	53.34	49–50	41–47	49–51	41–47	43–49
Broilers—12-city (cts./lb.)	59.0	54.8	51.2	52.2	53–54	44–50	50–52	46–52	47–53
Eggs—NY gr. A large (cts./doz.)	81.9	82.2	85.9	70.2	77–78	79–85	78–80	75–81	73–79
Milk—all at plant ($/cwt)	13.57	13.68	11.60	11.37	12.25–12.45	12.90–13.90	12.00–12.35	11.50–12.50	11.60–12.60
Wheat—KC HRW ordinary ($/bu.)	4.36	3.44	2.81	3.00	—	—	—	—	—
Corn—Chicago ($/bu.)	2.55	2.51	2.45	2.51	—	—	—	—	—
Soybeans—Chicago ($/bu.)	6.70	5.93	5.70	5.73	—	—	—	—	—
Cotton—Avg. spot 41–34 (cts./lb.)	63.7	71.3	75.4	81.0	—	—	—	—	—

	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
Gross cash income ($ bil.)	150.6	155.5	157.2	152.0	164.9	171.8	179.5	185.1	181–186
Gross cash expenses ($ bil.)	111.0	119.0	109.3	105.2	109.8	114.4	121.2	125.4	124–129
Net cash income ($ bil.)	39.5	36.6	47.9	46.7	55.3	57.4	58.3	59.7	54–59
Net farm income ($ bil.)	15.3	26.3	31.0	31.0	39.7	41.0	49.2	49.6	41–46
Farm real estate values 5/									
Nominal ($ per acre)	788	801	713	640	599	632	661	668	682
Real (1982 $)	788	771	662	577	526	538	545	529	519

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.–Sept. fiscal years ending with year indicated. 3/ Sept.–Nov. first quarter; Dec.–Feb. second quarter; Mar.–May third quarter; Jun.–Aug. fourth quarter; Sept.–Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages, Jan.–Dec. 5/ 1990–91 values as of January 1. 1986–89 values as of February 1. 1983–85 values as of April 1. F = forecast, — = not available.

* The pork carcass to retail conversion factor has been revised. ** Omaha Choice steer price has been replaced by the Nebraska Direct, 1,100–1,300 lb Choice steer price.

U.S. & Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1990			1991	
	1988	1989	1990	II	III	IV	I	II R
	$ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	4,873.7	5,200.8	5,465.1	5,443.3	5,514.8	5,527.3	5,557.7	5,615.8
Personal consumption expenditures	3,238.2	3,450.1	3,657.3	3,622.7	3,693.4	3,724.9	3,742.8	3,791.2
Durable goods	457.5	474.8	480.3	478.4	482.3	468.5	455.3	454.0
Nondurable goods	1,060.0	1,130.0	1,193.7	1,179.0	1,205.0	1,216.0	1,212.7	1,222.9
Clothing & shoes	191.1	204.8	213.2	212.8	215.8	211.5	213.3	216.8
Food & beverages	562.6	595.3	624.7	623.3	629.8	629.4	636.7	643.3
Services	1,720.7	1,845.5	1,983.3	1,965.3	2,006.2	2,040.4	2,074.8	2,114.2
Gross private domestic investment	747.1	771.2	741.0	759.0	759.7	698.3	660.0	656.8
Fixed investment	720.8	742.9	746.1	745.6	750.7	729.2	694.1	690.3
Change in business inventories	26.2	28.3	-5.0	13.4	9.0	-30.8	-34.2	-33.5
Net exports of goods & services	-74.1	-46.1	-31.2	-24.9	-41.3	-28.8	13.5	14.9
Government purchases of goods & services	962.5	1,025.6	1,098.1	1,086.4	1,102.8	1,132.9	1,141.5	1,152.9
	1982 $ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	4,016.9	4,117.7	4,157.3	4,155.1	4,170.0	4,153.4	4,124.1	4,123.0
Personal consumption expenditures	2,606.5	2,656.8	2,681.8	2,678.8	2,696.8	2,673.8	2,663.7	2,682.1
Durable goods	416.2	428.0	427.4	426.8	429.5	415.8	402.9	401.8
Nondurable goods	909.4	919.9	911.1	911.2	916.4	901.2	897.1	903.1
Clothing & shoes	165.0	172.7	172.8	171.3	174.4	170.6	167.0	171.3
Food & beverages	462.2	462.9	457.4	459.3	459.4	453.6	453.5	453.8
Services	1,278.9	1,309.0	1,343.1	1,340.8	1,350.8	1,356.7	1,363.7	1,377.4
Gross private domestic investment	705.7	716.9	688.7	700.7	697.0	656.3	623.7	619.6
Fixed investment	682.1	693.1	692.3	691.2	692.3	682.7	648.6	647.3
Change in business inventories	23.6	23.8	-3.6	9.5	4.7	-26.4	-25.0	-27.7
Net exports of goods & services	-75.9	-54.1	-33.8	-44.8	-46.5	-8.8	7.1	-14.5
Government purchases of goods & services	780.5	798.1	820.8	820.2	822.7	832.3	829.6	835.8
GNP implicit price deflator (% change)	3.3	4.1	4.1	4.7	3.7	2.8	5.2	4.2
Disposable personal income ($ bil.)	3,479.2	3,725.5	3,946.1	3,925.7	3,969.1	4,001.9	4,021.3	4,069.8
Disposable per. income (1982 $ bil.)	2,800.5	2,869.0	2,893.5	2,902.8	2,898.0	2,872.4	2,861.9	2,879.3
Per capita disposable per. income ($)	14,123	14,973	15,695	15,639	15,765	15,849	15,887	16,042
Per capita dis. per. income (1982 $)	11,368	11,531	11,509	11,564	11,511	11,376	11,307	11,349
U.S. population, total, incl. military abroad (mil.)	246.4	248.8	251.4	251.0	251.8	252.5	252.9	253.3
Civilian population (mil.)	244.1	246.6	249.2	248.9	249.6	250.4	250.8	251.1

	Annual			1990	1991			
	1988	1989	1990	July	Apr	May	June	July P
	Monthly data seasonally adjusted							
Industrial production (1987=100)	105.4	108.1	109.2	110.4	105.5	106.4	107.1	107.6
Leading economic indicators (1982=100)	142.7	144.9	144.0	146.2	141.8	142.8	143.7	145.4
Civilian employment (mil. persons)	115.0	117.3	117.9	117.9	117.4	116.6	116.9	116.7
Civilian unemployment rate (%)	5.4	5.2	5.4	5.5	6.6	6.9	7.0	6.8
Personal income ($ bil. annual rate)	4,070.8	4,384.3	4,645.5	4,662.7	4,756.6	4,789.0	4,813.3	4,807.7
Money stock–M2 (daily avg.) ($ bil.) 1/	3,069.9	3,223.1	3,328.2	3,295.5	3,384.3	3,397.2	3,402.1	3,391.0
Three–month Treasury bill rate (%)	6.69	8.12	7.51	7.66	5.67	5.51	5.60	5.58
AAA corporate bond yield (Moody's) (%)	9.71	9.26	9.32	9.24	8.86	8.86	9.01	9.00
Housing starts (1,000) 2/	1,488	1,376	1,193	1,155	977	983	1,032	1,070
Auto sales at retail, total (mil.)	10.6	9.9	9.5	9.7	7.9	8.4	9.0	9.1
Business inventory/sales ratio	1.49	1.51	1.51	1.51	1.54	1.51	1.51	—
Sales of all retail stores ($ bil.)	137.6	145.1	150.6	150.7	151.0	152.7	152.9 P	153.7
Nondurable goods stores ($ bil.)	85.3	90.8	96.0	96.0	97.5	98.6	98.7 P	99.1
Food stores ($ bil.)	27.2	28.8	30.2	30.3	30.7	31.1	31.3 P	31.2
Eating & drinking places ($ bil.)	13.9	14.5	15.2	15.3	15.6	15.8	16.0 P	16.0
Apparel & accessory stores ($ bil.)	7.1	7.6	7.9	8.1	8.1	8.1	8.1 P	8.1

	Annual			1990	1991			
	1988	1989	1990	Aug	May	June	July	Aug
Foreign exchange value of the dollar								
Japanese yen per U.S. dollar	128.2	138.1	145.0	147.6	138.1	139.6	137.8	137.0
German marks per U.S. dollar	1.757	1.881	1.617	1.573	1.720	1.780	1.780	1.745

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F	Average 1981–90
	Annual percent change											
World, less U.S.												
Real GDP	1.1	2.2	3.8	3.5	3.2	3.4	4.5	3.5	2.4	1.6	2.7	2.9
Consumer prices	13.6	12.3	12.8	13.1	10.3	11.9	18.5	35.9	39.7	45.1	30.2	18.2
Merch. exports	-7.9	-1.5	5.4	1.8	11.7	18.3	12.8	7.2	14.7	8.9	8.9	6.0
Developed less U.S.												
Real GDP	1.0	2.1	3.7	3.4	2.7	3.2	4.5	3.7	3.3	2.0	3.1	2.9
Consumer prices	8.2	5.9	4.9	4.5	2.7	2.6	2.9	4.3	4.8	5.2	4.3	5.1
Merch. exports	-4.4	-0.5	6.3	4.6	19.4	17.8	12.2	6.0	17.1	10.3	8.3	7.5
Developing												
Real GDP	1.9	1.3	4.5	4.5	2.8	4.1	4.2	3.4	2.7	3.1	4.8	3.2
Consumer prices	25.3	32.9	38.3	38.8	30.2	35.3	56.4	76.0	102.7	40.9	26.4	46.4
Merch. exports	-13.3	-3.3	3.8	-3.2	-3.4	19.7	14.2	10.1	9.4	7.0	11.5	3.2
Asia												
Real GDP	5.7	8.1	8.4	6.8	6.9	8.1	9.0	5.5	5.3	5.0	5.2	7.0
Consumer prices	6.4	6.6	6.1	6.0	6.7	6.6	8.0	7.5	8.8	9.1	9.2	7.4
Merch. exports	-0.5	4.6	14.6	-0.9	8.8	30.1	23.2	11.5	11.5	7.5	9.5	11.0
Latin America												
Real GDP	-1.5	-2.8	3.6	3.4	4.7	2.4	0.2	1.5	-1.0	1.0	3.3	1.0
Consumer prices	67.1	108.7	133.5	145.1	87.8	115.6	218.6	345.8	522.1	122.9	65.5	180.5
Merch. exports	-10.6	-0.2	6.3	-5.5	-17.9	13.6	14.1	12.2	9.0	3.8	4.7	2.7
Africa												
Real GDP	1.2	-0.8	0.7	3.6	1.4	1.2	2.7	3.3	1.9	2.0	2.9	1.3
Consumer prices	13.3	17.8	20.0	13.1	14.7	13.2	18.2	21.3	13.9	17.6	14.6	16.1
Merch. exports	-27.9	15.2	-1.0	-2.5	-17.0	14.3	-2.6	3.1	20.0	2.9	4.0	-1.7
Middle East												
Real GDP	3.0	0.6	-0.2	2.2	-0.4	0.1	5.8	3.2	-1.5	-3.3	8.5	2.0
Consumer prices	11.4	9.9	11.7	9.4	10.0	20.4	21.0	14.3	16.9	13.3	13.2	12.9
Merch. exports	-22.0	-23.0	-12.1	-7.9	-20.4	13.3	2.1	19.0	13.3	-7.0	13.1	-4.2
Central Europe, & USSR												
Real GDP	2.4	2.7	1.9	0.6	3.3	1.0	1.6	1.0	-7.1	-14.8	-2.4	0.8
Consumer prices	15.4	6.4	5.8	6.3	10.1	12.4	20.6	93.8	83.1	221.2	154.9	26.3
Merch. exports	8.1	3.8	1.0	-1.9	5.7	10.1	5.2	-0.1	-5.3	-10.9	3.1	3.0

F = forecast.

Information contact: Alberto Jerardo, (202) 219–0717.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1990	1991					
	1988	1989	1990	Aug	Mar	Apr	May	June	July R	Aug P
	1977 = 100									
Prices received										
All farm products	138	147	150	151	149	149	152	155	150	146
All crops	126	134	128	125	128	131	138	146	137	136
Food grains	138	156	123	108	107	110	112	108	106	113
Feed grains & hay	120	128	123	126	122	124	122	115	113	117
Feed grains	117	123	118	122	117	119	117	113	112	115
Cotton	95	98	107	107	113	117	114	111	109	112
Tobacco	132	145	149	146	153	153	153	153	153	151
Oil-bearing crops	108	102	92	94	94	94	93	92	89	87
Fruit, all	185	192	192	182	213	213	235	398	364	366
Fresh market 1/	197	203	202	190	228	228	253	449	410	413
Commercial vegetables	140	152	154	139	166	169	214	172	133	125
Fresh market	136	144	144	128	160	163	224	163	120	110
Potatoes & dry beans	124	186	191	201	136	164	222	188	191	142
Livestock & products	150	160	170	176	169	166	165	163	162	155
Meat animals	168	174	193	201	199	198	196	192	188	174
Dairy products	126	140	141	146	117	116	117	117	122	125
Poultry & eggs	118	137	131	126	136	122	119	120	127	125
Prices paid										
Commodities & services,										
interest, taxes, & wage rates	170	178	184	—	—	190	—	—	189	—
Production items	157	165	171	—	—	175	—	—	173	—
Feed	128	136	128	—	—	125	—	—	119	—
Feeder livestock	192	194	213	—	—	223	—	—	214	—
Seed	150	165	165	—	—	163	—	—	163	—
Fertilizer	130	137	131	—	—	136	—	—	136	—
Agricultural chemicals	127	139	139	—	—	153	—	—	153	—
Fuels & energy	167	180	204	—	—	198	—	—	196	—
Farm & motor supplies	145	150	154	—	—	157	—	—	157	—
Autos & trucks	215	223	231	—	—	247	—	—	248	—
Tractors & self-propelled machinery	181	193	202	—	—	210	—	—	210	—
Other machinery	197	208	216	—	—	227	—	—	227	—
Building & fencing	138	141	144	—	—	144	—	—	148	—
Farm services & cash rent	151	161	166	—	—	172	—	—	172	—
Int. payable per acre on farm real estate debt	182	176	174	—	—	173	—	—	173	—
Taxes payable per acre on farm real estate	147	152	157	—	—	162	—	—	162	—
Wage rates (seasonally adjusted)	177	185	191	—	—	202	—	—	202	—
Production items, interest, taxes, & wage rates	160	167	172	—	—	176	—	—	174	—
Ratio, prices received to prices paid (%) 2/	81	83	82	82	79	78	80	82	79	77
Prices received (1910–14=100)	632	674	684	690	681	679	694	706	685	668
Prices paid, etc. (parity index) (1910–14=100)	1,167	1,220	1,265	—	—	1,305	—	—	1,299	—
Parity ratio (1910–14=100) (%)2/	54	55	54	—	—	52	—	—	53	—

1/ Fresh market for noncitrus, fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219–0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1990	1991					
	1988	1989	1990	Aug	Mar	Apr	May	June	July R	Aug P
CROPS										
All wheat ($/bu.)	3 72	3.72	2.61	2 58	2 53	2.60	2.64	2.55	2.49	2.69
Rice, rough ($/cwt)	6.83	7.35	6.73	6.74	7.08	7.46	7.42	7.40	7.28	7 04
Corn ($/bu.)	2 54	2.36	2.30	2.51	2.39	2.42	2.38	2.31	2.28	2.34
Sorghum ($/cwt)	4.05	3.79	3.75	4.14	3.93	4.05	4.11	3.89	3.96	4 06
All hay, baled ($/ton)	85.20	86.00	66.00	83.40	84.50	88.60	84.20	71.60	70.60	71.50
Soybeans ($/bu)	7.42	5.70	5.75	6.00	5.76	5 77	5.67	5 55	5 38	5.31
Cotton, upland (cts./lb.)	55.6	66.2	67.8	64.7	68.5	70.8	68.9	67.2	65.7	67.8
Potatoes ($/cwt)	6.02	7.36	6.15	8.21	5.54	6.83	9.70	8.18	8.05	5.88
Lettuce ($/cwt) 2/	14.70	12.60	11.50	14.20	10.60	8.93	23.10	9.46	6.65	8.59
Tomatoes fresh ($/cwt) 2/	27.10	33.10	27.40	26.00	44.00	49.30	54.40	56.40	29.10	24.50
Onions ($/cwt)	9.75	11.40	10.50	10.80	13.00	20.10	22 60	14.60	17.00	11.60
Dry edible beans ($/cwt)	29.90	28 50	18 50	26.70	18.90	19.60	20.00	17.80	21.40	17.70
Apples for fresh use (cts./lb.)	17.4	13.9	20.9	22.3	20.2	19.9	22.5	24.2	24.8	24.6
Pears for fresh use ($/ton)	358.00	336.00	349.00	273.00	395.00	390 00	431.00	754.00	--	399.00
Oranges, all uses ($/box) 3/	7.18	7.08	6.99	4.71	7.41	7.37	7.95	21.35	19.48	20.45
Grapefruit, all uses ($/box) 3/	5.43	4.45	6.21	2.77	5.43	5.10	4.91	5.44	4.82	4.17
LIVESTOCK										
Beef cattle ($/cwt)	66 80	69.67	74.79	76.00	78.50	78.00	75.90	73.60	71 50	66.40
Calves ($/cwt)	89.85	91.84	96.51	98.90	107 00	109.00	107.00	106.00	103.00	97.80
Hogs ($/cwt)	42.54	43.24	53.99	55 90	51.40	50.80	54.10	54.70	54 20	49.90
Lambs ($/cwt)	69.50	67.33	56.01	54.00	51.10	54.60	57.60	55.30	57.70	55.90
All milk, sold to plants ($/cwt)	12.26	13.56	13.78	14.20	11 40	11.30	11.40	11.40	11.80	12.10
Milk, manuf. grade ($/cwt)	11.15	12.38	12.33	12.90	10.10	10.10	10.20	10.40	10.80	11.20
Broilers (cts./lb.)	34 0	36.1	32 4	32.6	30.6	30 4	31.3	31.4	32.6	32.3
Eggs (cts./doz.) 4/	53.2	70.0	70.4	66.1	80.5	65.1	59.5	59.3	65.0	63.8
Turkeys (cts./lb)	36.9	40.0	38.4	40.2	37 6	36.7	38.9	39.7	40.0	40.7
Wool (cts./lb.) 5/	138.0	124.0	76.8	71.0	47.9	58.4	67.4	71.8	56.4	53.0

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawaii. 3/ Equivalent on-tree returns. 4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments. R = revised. P = preliminary. — not available.

Information contact. Ann Duncan (202) 219–0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1990		1991						
	1990	July	Dec	Jan	Feb	Mar	Apr	May	June	July
	1982–84=100									
Consumer Price Index, all items	130 7	130.4	133.8	134.6	134.8	135.0	135.2	135.6	136.0	136.2
Consumer Price Index, less food	130.3	130.0	133.7	134.3	134.6	134.8	134.9	135.4	135.7	136.1
All food	132 4	132.7	134.2	135.8	135.5	135.8	136 7	136.8	137.2	136.5
Food away from home	133 4	133.9	135.7	135.8	136.2	136.5	137.1	137.5	137.9	138.4
Food at home	132.3	132.5	133.8	136.4	135.7	136.0	137.0	136.9	137.4	136.0
Meats 1/	128 5	130.3	133.6	133.5	132 8	133 1	132.7	133.4	133.5	133 1
Beef & veal	128.8	129 2	133.0	132.9	132 6	132.9	133.4	134.1	133 2	132.6
Pork	129.8	134.8	136.6	136.5	135.1	135.2	133 3	134 2	136.1	136.7
Poultry	132 5	135.3	129.7	131.3	132.7	131.9	131.1	132.7	131.5	132.5
Fish	146.7	143.3	148.5	151 1	148.7	149 6	148.2	147.0	146.7	146.1
Eggs	124.1	109.1	128.7	139.8	125.4	133.1	124.8	112.4	110.2	113.9
Dairy products 2/	126.5	125.7	126.7	125.2	125.2	124 9	124.5	124.4	123.9	124.0
Fats & oils 3/	128.3	126.6.	131.0	132 4	133.1	132.5	133.0	132.6	131.6	131.6
Fresh fruit	170.9	176.6	171.2	190.2	190.6	195.9	202.3	204.8	204.4	198.8
Processed fruit	136.9	140.1	134.6	134.7	133.2	132 2	132.3	132.1	131.2	130.6
Fresh vegetables	151.1	143.8	144.0	159 9	152.5	151.1	169.2	167.3	160.5	157.7
Potatoes	162.6	179.7	133 9	139.6	140 9	139.6	144 4	149.1	165.8	164.3
Processed vegetables	127.5	128.2	128.1	127.7	128.4	128 2	126.4	128.7	130.0	129.3
Cereals & bakery products	140.0	140.5	142.4	144.3	144.3	144.3	145.2	145.3	145.7	145.8
Sugar & sweets	124.7	124.9	126.4	127.3	127.1	128.3	128.2	129.2	129.5	129.9
Beverages, nonalcoholic	113.5	114.0	113.1	115.7	118.3	114.9	115.5	114.9	113.9	113.1
Apparel										
Apparel, commodities less footwear	122.8	118.8	123.8	122.0	124.8	127.7	129.1	128.3	125.2	123.2
Footwear	117.4	116.1	118.4	117.3	118.4	120.6	121.9	121.7	120.2	119.3
Tobacco & smoking products	181.5	185.7	190.5	195.8	196.7	197.6	199.2	199.6	202.9	203.7
Beverages, alcoholic	129.3	129.9	130 9	137.3	141.6	142.2	142.6	142.7	143.0	143.4

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219–0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1990	1991					
	1988	1989	1990	July	Feb	Mar R	Apr	May	June	July
					1982 = 100					
Finished goods 1/	108.0	113.6	119.2	118.2	121.4	120.9	120.9	121.7	121.9	121.6
Consumer foods	112.6	118.7	124.4	124.9	124.6	125.2	125.4	126.2	125.4	124.6
Fresh fruit	113.5	113.2	117.3	135.7	131.8	135.1	129.5	132.4	137.9	145.0
Fresh & dried vegetables	105.5	116.7	118.1	103.9	96.4	97.2	119.7	148.7	135.7	107.4
Dried fruit	99.1	103.0	106.7	105.0	111.4	111.4	111.3	111.3	111.3	111.8
Canned fruit & juice	120.2	122.7	126.9	127.8	127.3	126.6	126.9	127.3	126.8	126.5
Frozen fruit & juice	129.8	123.9	138.9	146.5	115.0	112.9	112.5	112.8	112.7	112.7
Fresh veg. excl. potatoes	100.4	103.9	107.8	93.3	87.3	88.4	112.8	157.0	138.0	102.0
Canned veg. & juices	108.3	118.6	116.7	116.5	114.8	115.1	114.4	114.8	112.7	113.1
Frozen vegetables	108.6	115.5	118.5	118.1	118.5	118.3	118.6	118.0	117.7	117.5
Potatoes	113.9	153.6	157.3	134.4	137.5	134.8	158.4	138.1	146.7	137.6
Eggs	88.6	119.6	117.6	91.6	110.5	131.7	113.2	94.6	96.9	100.7
Bakery products	126.4	135.4	140.9	140.7	145.5	145.8	145.6	145.5	146.3	146.1
Meats	99.9	104.8	116.9	119.6	117.0	117.8	117.4	118.0	117.4	116.1
Beef & veal	101.4	108.9	116.0	113.3	116.7	118.2	118.4	117.5	114.9	111.6
Pork	95.0	97.7	119.7	130.7	117.6	117.7	115.6	118.9	120.8	121.8
Processed poultry	111.6	120.4	113.6	120.9	108.5	108.4	108.7	111.6	111.8	113.3
Fish	148.7	142.9	148.6	136.6	157.1	158.7	162.6	165.1	146.4	146.6
Dairy products	102.2	110.6	117.2	119.5	112.0	111.9	111.8	111.6	112.0	113.6
Processed fruits & vegetables	113.8	119.9	124.8	126.1	120.2	119.8	119.5	119.7	118.8	119.2
Shortening & cooking oil	118.8	116.6	123.2	127.8	119.9	122.7	120.3	117.2	115.0	111.6
Soft drinks	114.3	177.7	122.3	121.2	127.6	127.0	127.1	126.0	126.5	125.8
Consumer finished goods less foods	103.1	108.9	115.3	113.2	118.2	117.0	117.0	118.1	118.6	118.3
Beverages, alcoholic	111.8	115.2	117.2	117.7	124.2	124.0	124.3	123.2	123.3	123.9
Apparel	111.7	114.5	117.4	117.7	118.8	119.0	119.1	119.2	119.5	119.8
Footwear	115.1	120.8	125.6	125.6	127.1	128.0	127.9	128.4	128.8	128.7
Tobacco products	171.9	194.8	221.5	224.3	237.4	239.6	243.3	243.4	249.1	254.3
Intermediate materials 2/	107.1	112.0	114.5	113.1	115.5	114.2	114.0	114.1	114.3	114.0
Materials for food manufacturing	106.0	112.7	117.9	120.8	115.5	116.2	116.3	115.7	115.3	115.5
Flour	105.7	114.6	103.6	103.1	92.6	94.4	96.1	96.2	95.7	93.1
Refined sugar 3/	108.9	116.2	122.7	123.2	123.2	111.8	122.1	121.1	121.0	121.4
Crude vegetable oils	116.6	103.1	115.7	124.4	110.0	111.8	109.2	102.7	101.6	95.9
Crude materials 4/	96.0	103.1	108.9	101.4	104.1	101.2	101.2	102.2	99.5	99.4
Foodstuffs & feedstuffs	106.1	111.2	113.1	115.4	107.3	109.9	109.0	108.6	107.4	104.9
Fruits & vegetables 5/	108.5	114.6	117.2	117.3	111.4	113.3	123.4	140.8	136.0	123.4
Grains	97.9	106.4	97.5	103.1	88.0	94.0	94.1	92.7	90.2	84.3
Livestock	103.3	106.1	115.6	114.7	113.9	117.1	115.8	115.2	112.8	110.2
Poultry, live	121.5	128.8	118.8	134.7	103.1	110.2	107.3	113.9	112.7	119.2
Fibers, plant & animal	98.4	107.8	117.8	129.4	126.3	129.1	134.0	139.2	130.8	120.2
Fluid milk	89.4	98.8	101.3	105.3	84.1	83.1	82.1	82.8	84.8	86.6
Oilseeds	134.0	123.8	111.8	114.8	111.2	111.8	109.7	107.5	108.7	99.3
Tobacco, leaf	87.2	93.8	96.0	93.7	100.2	99.6	99.6	99.6	99.6	99.6
Sugar, raw cane	111.9	115.5	119.2	119.6	113.1	113.3	113.1	112.9	113.3	112.6
All commodities	106.9	112.2	116.3	114.5	117.2	116.2	116.0	116.5	116.3	116.0
Industrial commodities	106.3	111.6	115.8	113.4	117.2	115.7	115.5	116.5	116.0	116.0
All foods 6/	111.5	117.8	123.2	124.2	122.5	123.3	123.7	124.5	123.5	122.7
Farm products & processed foods & feeds	110.0	115.4	118.6	120.0	117.1	118.3	118.2	118.5	117.7	116.3
Farm products	104.9	110.9	112.2	113.8	106.9	109.7	109.4	110.2	108.9	105.2
Processed foods & feeds 6/	112.7	117.8	121.9	123.2	122.3	122.6	122.7	122.7	122.1	121.8
Cereal & bakery products	123.0	131.1	134.1	134.3	136.0	136.6	137.2	137.6	137.8	137.1
Sugar & confectionery	114.7	120.1	123.1	123.9	128.4	127.8	128.9	129.0	128.4	130.3
Beverages	114.3	118.4	120.8	120.9	125.5	125.3	125.4	124.5	124.7	123.8

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Ann Duncan (202) 219–0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1990	1991					
	1988	1989	1990 P	July	Feb	Mar	Apr	May	June	July
Market basket 1/										
Retail cost (1982–84=100)	116.5	124.6	133.5	133.6	137.0	137.2	138.5	138.4	139.2	137.7
Farm value (1982–84=100)	100.5	107.1	113.3	113.0	108.2	108.3	108.2	110.8	109.8	106.8
Farm–retail spread (1982–84=100)	125.1	134.1	144.4	144.7	152.5	152.7	154.7	153.1	155.0	154.2
Farm value–retail cost (%)	30.2	30.1	29.7	29.6	27.7	27.7	27.4	28.1	27.6	27.2
Meat products										
Retail cost (1982–84=100)	112.2	116.7	128.5	130.3	132.8	133.1	132.7	133.4	133.5	133.1
Farm value (1982–84=100)	99.5	103.3	116.6	119.0	116.0	117.0	117.2	117.0	115.3	112.3
Farm–retail spread (1982–84=100)	125.2	130.4	140.6	141.9	150.0	149.7	148.6	150.2	152.2	154.5
Farm value–retail cost (%)	44.9	44.8	46.0	46.2	44.2	44.5	44.7	44.4	43.7	42.7
Dairy products										
Retail cost (1982–84=100)	108.4	115.6	126.5	125.7	125.2	124.9	124.5	124.4	123.9	124.0
Farm value (1982–84=100)	90.6	99.1	101.9	103.8	86.7	85.6	85.0	84.9	85.9	87.8
Farm–retail spread (1982–84=100)	124.7	130.6	149.2	145.9	160.7	161.2	160.9	160.8	159.0	157.4
Farm value–retail cost (%)	40.1	41.1	38.6	39.6	33.2	32.9	32.8	32.7	33.2	34.0
Poultry										
Retail cost (1982–84=100)	120.7	132.7	132.5	135.3	132.7	131.9	131.1	132.7	131.5	132.5
Farm value (1982–84=100)	110.2	117.1	107.6	118.6	97.7	101.1	100.1	103.7	104.3	107.7
Farm–retail spread (1982–84=100)	132.8	150.6	161.1	154.5	173.0	167.3	166.7	166.1	162.8	161.0
Farm value–retail cost (%)	48.9	47.2	43.5	46.9	39.4	41.0	40.9	41.8	42.5	43.5
Eggs										
Retail cost (1982–84=100)	93.6	118.5	124.1	109.1	125.4	133.1	124.8	112.4	110.2	113.9
Farm value (1982–84=100)	76.7	107.5	108.0	80.1	103.3	128.7	96.6	85.4	85.2	96.6
Farm–retail spread (1982–84=100)	123.9	138.1	153.2	161.2	165.2	141.0	175.5	160.9	155.0	145.0
Farm value–retail cost (%)	52.7	58.3	55.9	47.2	52.9	62.1	49.7	48.8	49.7	54.5
Cereal & bakery products										
Retail cost (1982–84=100)	122.1	132.4	140.0	140.5	144.3	144.3	145.2	145.3	145.7	145.8
Farm value (1982–84=100)	92.7	101.7	90.5	90.0	80.3	83.5	84.9	85.4	82.9	81.0
Farm–retail spread (1982–84=100)	126.2	136.7	148.9	147.5	153.2	152.8	153.6	153.7	154.5	154.8
Farm value–retail cost (%)	9.3	9.4	7.9	7.8	6.8	7.1	7.2	7.2	7.0	6.8
Fresh fruits										
Retail cost (1982–84=100)	145.4	154.7	174.6	177.2	196.5	197.4	206.5	207.3	209.7	203.6
Farm value (1982–84=100)	116.5	108.5	128.0	124.0	198.7	165.3	162.3	185.4	213.5	173.6
Farm–retail spread (1982–84=100)	158.7	176.0	196.0	201.8	195.5	212.2	226.9	217.4	207.9	217.7
Farm value–retail cost (%)	25.3	22.2	23.2	22.1	31.9	26.4	24.8	28.2	32.2	26.9
Fresh vegetables										
Retail costs (1982–84=100)	129.3	143.1	151.1	143.8	152.5	151.1	169.2	167.3	180.5	157.7
Farm value (1982–84=100)	105.8	123.3	124.2	108.4	106.7	103.5	131.3	161.8	134.2	119.2
Farm–retail spread (1982–84=100)	141.3	153.2	165.0	162.0	176.0	175.6	188.7	170.1	204.3	177.5
Farm value–retail cost (%)	27.8	29.3	27.9	25.6	23.8	23.2	26.3	32.8	25.3	25.7
Processed fruits & vegetables										
Retail cost (1982–84=100)	117.6	125.0	132.7	134.8	131.0	130.3	130.5	130.5	130.5	129.9
Farm value (1982–84=100)	136.6	133.6	147.2	135.1	122.3	122.9	122.9	122.9	122.5	121.5
Farm–retail spread (1982–84=100)	111.7	122.3	128.1	134.7	133.7	132.6	132.9	132.9	133.0	132.5
Farm value–retail costs (%)	27.6	25.4	26.4	23.8	22.2	22.4	22.4	22.4	22.3	22.2
Fats & oils										
Retail cost (1982–84=100)	113.1	121.2	126.3	126.6	133.1	132.5	133.0	132.6	131.6	131.6
Farm value (1982–84=100)	103.0	95.6	107.1	110.7	103.3	105.8	105.8	100.0	96.4	93.8
Farm–retail spread (1982–84=100)	116.8	130.6	133.4	132.4	144.1	142.3	143.0	144.6	144.6	145.5
Farm value–retail cost (%)	24.5	21.2	22.8	23.5	20.9	21.5	21.4	20.3	19.7	19.2

	Annual			1990	1991					
	1988	1989	1990 P	July	Feb	Mar	Apr	May	June	July
Beef, Choice										
Retail price 2/ (cts./lb.)	250.3	265.7	281.0	279.9	292.5	295.4	297.1	296.1	292.4	288.4
Wholesale value 3/ (cts.)	169.4	176.8	189.6	182.4	189.6	193.4	194.1	190.9	186.1	178.8
Net farm value 4/ (cts.)	148.3	157.6	168.4	160.5	171.1	175.5	175.3	170.0	160.9	156.2
Farm–retail spread (cts.)	102.0	108.1	112.6	119.4	121.4	119.9	121.8	126.1	131.5	132.2
Wholesale–retail 5/ (cts.)	80.9	88.9	91.4	97.5	102.9	102.0	103.0	105.2	106.3	109.6
Farm–wholesale 6/ (cts.)	21.1	19.2	21.2	21.9	18.5	17.9	18.8	20.9	25.2	22.6
Farm value–retail price (%)	59	59	60	57	58	59	59	57	55	54
Pork										
Retail price 2/ (cts./lb.)	183.4	182.9	212.6	222.2	215.5	213.9	211.7	213.3	214.6	217.7
Wholesale value 3/ (cts.)	101.0	99.2	118.3	127.3	110.1	110.8	109.7	115.5	116.0	115.7
Net farm value 4/ (cts.)	69.4	70.4	87.2	99.2	83.1	82.7	81.4	87.4	87.7	89.0
Farm–retail spread (cts.)	114.0	112.5	125.4	123.0	132.4	131.2	130.3	125.9	126.9	128.7
Wholesale–retail 5/ (cts.)	82.4	83.7	94.3	94.9	105.4	103.1	102.0	97.8	98.6	102.0
Farm–wholesale 6/ (cts.)	31.6	28.8	31.1	28.1	27.0	28.1	28.3	28.1	28.3	26.7
Farm value–retail price (%)	38	38	41	45	39	39	38	41	41	41

1/ Retail costs are based on CPI–U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm–retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in–city transportation. 6/ Charges for livestock marketing, processing, & transportation.
P = preliminary.

Information contacts: Denis Dunham (202) 219–0870, Larry Duewer (202) 219–0712.

Table 9.—Price Indexes of Food Marketing Costs

(See the September 1991 issue.)
Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Production 1/	Imports	Total supply	Exports	Ending stocks	Consumption: Total	Consumption: Per capita 2/	Primary market price 3/
	Million pounds 4/							Pounds	
Beef									
1988	386	23,589	2,380	26,355	681	422	25,252	72.6	71.19
1989	422	23,087	2,179	25,688	1,023	335	24,330	69.3	73.86
1990	335	22,743	2,356	25,434	1,006	397	24,031	67.8	78.56
1991 F	397	22,986	2,280	25,663	1,150	315	24,198	67.6	74–76
Pork									
1988	360	15,684	1,136	17,180	195	437	16,548	52.5	43.39
1989	437	15,813	896	17,146	262	313	16,571	52.0	44.03
1990	313	15,354	898	16,565	239	296	16,030	49.8	54.45
1991 F	296	16,021	872	17,189	257	375	16,557	50.9	49–51
Veal 5/									
1988	4	396	27	427	10	5	412	1.4	89.85
1989	5	355	0	360	0	4	356	1.2	91.84
1990	4	327	0	331	0	6	325	1.1	96.51
1991 F	6	307	0	313	0	4	309	1.0	101–103
Lamb & mutton									
1988	8	335	51	394	1	6	387	1.4	68.26
1989	6	347	63	416	2	8	406	1.5	67.32
1990	8	363	59	430	3	8	419	1.5	55.54
1991 F	6	361	60	429	2	9	418	1.5	52–54
Total red meat									
1988	758	40,004	3,594	44,356	887	870	42,599	127.9	—
1989	870	39,602	3,138	43,610	1,287	660	41,663	124.0	—
1990	660	38,787	3,313	42,760	1,248	707	40,805	120.1	—
1991 F	707	39,675	3,212	43,594	1,409	703	41,482	121.0	--
Broilers									
1988	25	16,187	0	16,212	765	36	15,410	62.9	56.3
1989	36	17,424	0	17,460	814	38	16,608	67.1	59.0
1990	38	18,660	0	18,698	1,143	26	17,529	70.1	54.8
1991 F	26	19,732	0	19,758	1,120	35	18,603	73.7	50–52
Mature chicken									
1988	188	633	0	821	26	157	639	2.6	—
1989	157	568	0	725	24	189	511	2.1	--
1990	189	588	0	777	25	224	528	2.1	—
1991 F	224	559	0	783	26	240	517	2.0	--
Turkeys									
1988	266	3,960	0	4,226	51	250	3,926	16.0	61.2
1989	250	4,285	0	4,535	41	236	4,259	17.2	66.7
1990	236	4,734	0	4,970	54	306	4,610	18.4	63.2
1991 F	306	4,837	0	5,144	70	260	4,813	19.1	62–64
Total poultry									
1988	479	20,780	0	21,259	842	442	19,975	81.5	--
1989	442	22,278	0	22,720	878	463	21,378	86.4	—
1990	463	23,982	0	24,445	1,222	557	22,666	90.7	--
1991 F	557	25,128	0	25,685	1,216	535	23,934	94.8	—
Red meat & poultry									
1988	1,237	60,784	3,594	65,615	1,729	1,312	62,573	209.4	—
1989	1,312	61,880	3,138	66,330	2,165	1,123	63,042	210.4	--
1990	1,123	62,769	3,313	67,205	2,470	1,264	63,471	210.8	--
1991 F	1,264	64,803	3,212	69,279	2,625	1,238	65,416	215.8	

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was 70.5) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100–1,300 lb.; pork: barrows & gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8–16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. -- = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro-duc-tion	Im-ports	Total supply	Ex-ports	Hatch-ing use	Ending stocks	Consumption: Total	Consumption: Per capita	Wholesale price*
	Million dozen								No.	Cts./doz.
1987	10.4	5,868.2	5.6	5,884.2	111.2	599.1	14 4	5,159.5	254.9	61.6
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	246.8	62.1
1989	15.2	5,597.8	25.2	5,638.2	91.8	642.9	10.7	4,893.0	237.3	81.9
1990	10.7	5,659.9	9.1	5,679.6	100.5	675.8	11.6	4,891.7	234.8	82.2
1991 F	11.6	5,729 3	1.7	5,742.7	134.8	707.6	12 0	4,888.4	232.4	78–80
1992 F	12 0	5,745.0	3.0	5,760 0	130.0	740.0	12.0	4,878.0	230.0	73–79

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219–0767.

Table 12.—U.S. Milk Supply & Use

	Produc-tion	Commercial: Farm use	Commercial: Farm market-ings	Commercial: Beg. stock	Im-ports	Total commer-cial supply	CCC net re-movals	Commercial: Ending stocks	Commercial: Disap-pear-ance	All milk price 1/	CCC net removals: Skim solids basis	CCC net removals: Total solids basis 2/
	Billion pounds (milkfat basis)									$/cwt	Billion pounds	
1984	135.4	2.9	132.4	5.1	2.7	140 2	8.7	4.8	126.7	13.46	12 4	10.9
1985	143.0	2.5	140.6	4.8	2.8	148.2	13.3	4.5	130.4	12.76	17.2	15.6
1986	143.1	2.4	140.7	4.5	2.7	147.9	10.8	4.1	133.0	12.51	14.3	12.9
1987	142.7	2.3	140.5	4.1	2.5	147.1	6.8	4.6	135.7	12.54	9.3	8.3
1988	145.2	2.2	142.9	4.6	2.4	149.9	9.1	4.3	136.5	12.26	5.5	6.9
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.5	13.56	0.4	4.0
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	139.0	13.73	1.6	4.6
1991 F	148.0	2.0	146.0	5.1	2.5	153.6	10.1	4.6	138.9	12.20	4.0	6.5

1/ Delivered to plants & dealers; does not reflect deductions. 2/ Arbitrarily weighted average of milkfat basis (40 percent) & skim solids basis (60 percent). F = forecast.

Information contact: Jim Miller (202) 219–0770.

Table 13.—Poultry & Eggs

	Annual: 1988	Annual: 1989	Annual: 1990	1990: July	1991: Feb	1991: Mar	1991: Apr	1991: May	1991: June	1991: July
Broilers										
Federally inspected slaughter, certified (mil. lb.)	16,124.4	17,334.2	18,553.9	1,516.8	1,488.1	1,516.4	1,692.0	1,739.9	1,572.1	1,705.9
Wholesale price, 12-city (cts./lb.)	56.3	59.0	54.8	59.5	50.6	51.4	52.0	52.0	52.7	54.3
Price of grower feed ($/ton)	219	237	218.3	220	214	211	2.09	209	209	204
Broiler–feed price ratio 1/	3.1	3.0	3.0	3.3	2.8	2.9	2 9	3.0	3.0	3.2
Stocks beginning of period (mil. lb.)	24.8	35.9	38.3	30.0	22.7	27.3	30.5	32.8	38 3	41.9
Broiler–type chicks hatched (mil.) 2/	5,602.4	5,946.9	6,314.6	542.4	497.1	567.1	554.0	583.4	566.7	561.4
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	3,923.4	4,174.8	4,560.9	395.7	322.0	330.1	377.1	398.4	365.0	401.7
Wholesale price, Eastern U.S., 8–16 lb. young hens (cts./lb.)	61.2	66 7	63.2	63.4	55.8	59.1	60.3	62.3	62.7	63.4
Price of turkey grower feed ($/ton)	243	251	238.4	237	237	235	237	238	234	229
Turkey–feed price ratio 1/	3.0	3.2	3.2	3 3	2.9	3.2	3.1	3.3	3.4	3.5
Stocks beginning of period (mil. lb.)	266.2	249.7	235.9	481.3	301.1	339.1	365.9	406.0	451.3	503.1
Poults placed in U.S. (mil.)	261.4	290.7	304.9	29.0	25.3	25.8	28.8	29.8	28.2	28.8
Eggs										
Farm production (mil.)	69,410	67,174	67,919	5,703	5,284	5,889	5,821	5,761	5,620	5,835
Average number of layers (mil.)	277	269	270	266	274	272	271	271	271	271
Rate of lay (eggs per layer on farms)	251	250	251.7	21.4	19.3	21.6	20.7	21.3	20.7	21.5
Cartoned price, New York, grade A large (cts./doz.) 3/	62.1	61.9	62.2	70.9	78.3	91.9	74.9	67.0	68.8	79.6
Price of laying feed ($/ton)	203	209	202	205	199	199	195	195	194	188
Egg–feed price ratio 1/	5.3	6.7	6.9	5.6	6.8	8.1	6.7	6.1	6.1	6.9
Stocks, first of month										
Shell (mil. doz.)	1.29	0.27	0.38	0.66	0.51	0 27	0.42	0.36	0.45	0.39
Frozen (mil. doz.)	13.1	14.9	10.3	13.7	11.2	10.6	10.7	9.8	10.3	10.8
Replacement chicks hatched (mil.)	366	383	399.0	31.6	34.8	37.0	39.5	36.9	35.5	34.7

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler–type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219–0767.

Table 14.—Dairy

	Annual			1990	1991					
	1988	1989	1990	July	Feb	Mar	Apr	May	June	July
Milk prices, Minnesota–Wisconsin, 3.5% fat ($/cwt) 1/	11.03	12.37	12.21	13.43	10.04	10.02	10.04	10.23	10.58	10.99
Wholesale prices										
Butter, grade A Chi. (cts./lb.)	132.5	127.9	102.1	100.3	97.3	97.3	97.3	97.3	98.1	98.9
Am. cheese, Wis. assembly pt. (cts./lb.)	123.8	138.8	136.7	151.0	111.5	111.6	111.7	115.0	121.4	128.4
Nonfat dry milk (cts./lb.) 2/	79.7	105.6	100.6	125.2	85.1	85.1	85.4	88.1	88.9	92.2
USDA net removals										
Total milk equiv. (mil. lb.) 3/	9,070.1	9,357.0	8,951.2	489.7	1,659.8	1,264.3	1,685.4	1,503.6	637.7	306.3
Butter (mil. lb.)	312.8	413.4	400.3	22.5	66.1	52.0	70.4	65.2	26.2	14.3
Am. cheese (mil. lb.)	238.1	37.4	21.6	0	18.0	13.0	15.1	8.2	7.1	–0.6
Nonfat dry milk (mil. lb.)	267.5	0	117.8	0	44.2	42.5	48.4	28.8	4.7	–0.6
Milk										
Milk prod. 21 States (mil. lb.)	123,518	122,509	125,714	10,691	9,948	11,097	10,906	11,228	10,573	10,505
Milk per cow (lb.)	14,291	14,369	14,768	1,260	1,172	1,311	1,294	1,334	1,260	1,254
Number of milk cows (1,000)	8,643	8,526	8,513	8,487	8,487	8,464	8,426	8,418	8,389	8,375
U.S. milk production (mil. lb.)	145,152	144,239	148,284 6/	12,576 6/	11,756 6/	13,113 6/	12,872 6/	13,262 6/	12,498 6/	12,358
Stock, beginning										
Total (mil. lb.)	7,473	8,379	9,036	13,728	14,758	15,730	16,765	18,402	19,055	19,519
Commercial (mil. lb.)	4,596	4,256	4,120	5,452	5,833	6,802	6,969	6,289	6,211	6,156
Government (mil. lb.)	2,877	4,122	4,916	8,275	8,925	9,928	10,796	12,113	12,844	13,363
Imports, total (mil. lb.) 3/	2,394	2,499	2,890	233	142	165	174	238	253	—
Commercial disappearance (mil. lb.)	136,574	135,439	138,947	12,028	10,111	11,663	10,873	11,890	12,000	—
Butter										
Production (mil. lb.)	1,207.6	1,295.4	1,302.2	84.6	126.3	131.8	133.7	126.0	98.3	88.9
Stocks, beginning (mil. lb.)	143.2	214.7	256.2	420.0	470.8	524.8	555.9	616.8	647.5	665.6
Commercial disappearance (mil. lb.)	909.8	876.0	915.2	65.3	51.8	85.1	58.3	65.2	78.0	—
American cheese										
Production (mil. lb.)	2,756.8	2,674.1	2,890.8	241.0	222.4	250.0	236.9	247.5	235.2	225.0
Stocks, beginning (mil. lb.)	370.4	293.0	236.2	337.6	381.6	343.5	381.4	403.8	406.9	412.4
Commercial disappearance (mil. lb.)	2,570.0	2,683.1	2,781.0	219.3	222.0	206.7	207.4	241.8	224.4	—
Other cheese										
Production (mil. lb.)	2,815.4	2,941.3	3,170.4	261.2	235.6	271.3	263.8	266.5	270.2	264.9
Stocks, beginning (mil. lb.)	89.7	104.7	93.2	129.1	113.0	107.5	106.2	106.9	103.8	107.7
Commercial disappearance (mil. lb.)	3,034.5	3,208.9	3,429.8	291.9	254.7	288.3	282.2	296.5	291.0	—
Nonfat dry milk										
Production (mil. lb.)	979.7	874.7	876.6	75.6	77.9	87.6	95.1	101.4	78.6	69.8
Stocks, beginning (mil. lb.)	177.2	53.1	49.5	93.3	188.4	207.1	255.8	287.0	328.5	342.8
Commercial disappearance (mil. lb.)	734.3	873.0	695.0	60.6	44.4	51.8	51.3	62.7	80.9	—
Frozen dessert										
Production (mil. gal.) 4/	1,248.0	1,214.0	1,162.9	122.0	82.3	99.3	103.5	114.7	124.9	126.4

	Annual			1989	1990				1991	
	1988	1989	1990	IV	I	II	III	IV	I P	II P
Milk production (mil. lb.)	145,152	144,239	148,284	34,939	36,740	38,626	36,632	36,285	37,470	38,622
Milk per cow (lb.)	14,145	14,244	14,642	3,451	3,627	3,820	3,620	3,575	3,708	3,855
No. of milk cows (1,000)	10,262	10,126	10,127	10,126	10,128	10,111	10,119	10,151	10,104	10,019
Milk–feed price ratio 5/	1.58	1.65	1.72	1.92	1.83	1.69	1.74	1.57	1.49	1.47
Returns over concentrate 5/ costs ($/cwt milk)	8.99	10.18	10.39	12.16	11.13	10.00	10.50	9.03	8.30	8.19

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219–0770.

Table 15.—Wool

	Annual			1990				1991	
	1988	1989	1990	I	II	III	IV	I	II
U.S. wool price, (cts./lb.) 1/	438	370	256	289	272	238	227	197	200
Imported wool price, (cts./lb.) 2/	372	354	257	327	312	281	270	235	199
U.S. mill consumption, scoured									
Apparel wool (1,000 lb.)	117,069	120,534	120,822	31,511	31,726	26,888	30,497	33,320	38,672
Carpet wool (1,000 lb.)	15,833	14,122	12,124	3,911	2,950	3,885	2,984	3,088	3,136

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60–22.04 microns) staple 2–3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. — = not available.

Information contact: John Lawler (202) 219–0840.

Table 16.—Meat Animals

	Annual			1990	1991					
	1988	1989	1990	July	Feb	Mar	Apr	May	June	July
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,411	8,045	8,378	7,310	9,103	8,974	9,058	8,675	8,585	7,847
Placed on feed (1,000 head)	20,654	20,834	21,215	1,520	1,425	1,718	1,402	1,717	1,077	1,317
Marketings (1,000 head)	19,918	19,422	19,238	1,750	1,441	1,499	1,655	1,666	1,701	1,724
Other disappearance (1,000 head)	1,202	1,079	1,218	77	113	137	128	141	114	92
Beef steer–corn price ratio, Omaha 2/	31.5	30.3	32.8	28.5	34.3	34.0	32.8	32.7	32.0	31.3
Hog–corn price ratio, Omaha 2/	19.6	18.4	23.1	23.9	22.8	21.8	20.8	22.9	23.6	24.2
Market prices ($/cwt)										
Slaughter cattle										
Choice steers, Omaha 1,000–1,100 lb.	69.54	72.52	77.40	74.46	78.63	80.75	80.77	78.28	74.63	72.08
Choice steers, Neb. Direct, 1,100–1,300 lb.	71.19	73.86	78.56	75.95	79.60	81.23	81.09	78.29	74.39	72.15
Boning utility cows, Sioux Falls	47.21	48.98	53.60	55.75	51.49	52.06	52.13	53.40	54.19	52.41
Feeder cattle										
Medium no. 1, Oklahoma City 600–700 lb.	84.72	86.66	92.15	93.35	95.53	96.38	96.62	97.06	97.30	95.81
Slaughter hogs										
Barrows & gilts, 7–markets	43.39	44.03	54.45	61.67	51.93	51.57	51.01	54.47	54.55	55.22
Feeder pigs										
S. Mo. 40–50 lb. (per head)	36.06	33.63	51.46	46.35	57.47	63.63	60.97	52.98	42.78	40.98
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	68.26	67.32	55.54	53.25	45.81	54.88	55.50	57.70	55.75	55.50
Ewes, Good, San Angelo	38.68	38.58	35.21	34.63	30.38	34.88	35.50	29.90	33.38	34.63
Feeder lambs										
Choice, San Angelo	90.89	79.85	62.95	63.75	49.06	59.25	58.63	54.98	49.69	51.81
Wholesale meat prices, Midwest										
Boxed beef cut-out value	110.50	114.78	123.21	118.54	123.24	125.45	125.96	123.78	120.81	115.62
Canner & cutter cow beef	87.77	94.43	99.96	101.62	100.50	103.43	101.93	103.31	105.15	101.89
Pork loins, 14–18 lb. 3/	97.49	101.09	117.52	144.14	109.13	110.33	104.81	120.48	123.49	121.73
Pork bellies, 12–14 lb.	41.25	34.14	53.80	53.18	57.20	58.52	57.25	57.50	56.48	50.40
Hams, skinned, 14–17 lb.	71.03	69.39	67.70	91.00	83.17	81.42	75.00	80.00	NQ	85.00
All fresh beef retail price 4/	224.81	238.97	254.99	255.75	261.57	261.39	265.15	265.87	264.50	263.39
Commercial slaughter (1,000 head)*										
Cattle	35,079	33,917	33,242	2,861	2,469	2,510	2,741	2,851	2,709	2,644
Steers	17,346	16,539	16,587	1,455	1,220	1,249	1,439	1,491	1,445	1,515
Heifers	10,753	10,406	10,090	911	741	741	790	850	813	863
Cows	6,338	6,316	5,920	442	461	472	460	454	400	415
Bulls & stags	644	657	644	53	47	48	52	56	51	51
Calves	2,506	2,172	1,789	143	125	123	109	105	92	111
Sheep & lambs	5,293	5,465	5,654	448	461	565	457	461	406	451
Hogs	67,795	88,691	85,135	6,153	6,637	7,218	7,495	7,130	6,296	6,733
Commercial production (mil. lb.)										
Beef	23,424	22,974	22,634	1,945	1,694	1,721	1,672	1,948	1,874	1,996
Veal	387	344	316	25	26	25	23	23	20	22
Lamb & mutton	329	341	357	27	30	36	29	30	25	28
Pork	15,623	15,759	15,299	1,103	2,954	1,301	1,361	1,291	1,140	1,207

	Annual			1990				1991		
	1988	1989	1990	I	II	III	IV	I	II	III
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	10,114	9,688	9,943	9,943	10,063	8,761	9,092	10,977	10,869	9,426
Placed on feed (1,000 head)	24,423	24,469	24,948	6,083	5,086	6,333	7,486	5,692	4,890	—
Marketings (1,000 head)	23,459	22,940	22,561	5,578	5,968	5,741	5,254	5,338	5,869 6/	6,044
Other disappearance (1,000 head)	1,390	1,274	1,393	385	400	261	347	462	464	—
Hogs & pigs (10 States) 5/										
Inventory (1,000 head) 1/	42,675	43,210	42,200	42,200	40,190	42,630	44,120	42,900	41,990	44,520
Breeding (1,000 head) 1/	5,435	5,335	5,275	5,275	5,245	5,405	5,300	5,257	5,450	5,700
Market (1,000 head) 1/	37,240	37,875	36,925	36,925	34,945	37,225	38,820	37,643	36,540	38,820
Farrowings (1,000 head)	9,370	9,203	8,955	2,028	2,458	2,236	2,238	2,129	2,577	2,413
Pig crop (1,000 head)	72,268	71,807	70,549	15,870	19,576	17,684	17,459	16,770	20,555	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8–14 lb.; 1984 & 1985, 14–17 lb; beginning 1986, 14–18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year–Feb. (I), Mar.–May (II), June–Aug. (III), & Sept–Nov. (IV). 6/ Intentions.
*Classes estimated. May not add to NASS totals due to rounding. — = not available. NQ = no quotation.

Information contact: Polly Cochran (202) 219–0767.

Crops & Products

Table 17.—Supply & Utilization[1,2]

	Area											
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Mil. acres			Bu./acre				Mil. bu.				$/bu.
Wheat												
1986/87	21.0	72.0	60.7	34.4	2,091	4,017	401	796	999	2,196	1,821	2.42
1987/88	23.9	65.8	55.9	37.7	2,108	3,945	280	806	1,598	2,684	1,261	2.57
1988/89	22.6	65.5	53.2	34.1	1,812	3,096	146	829	1,419	2,394	702	3.72
1989/90*	9.6	76.6	62.2	32.7	2,037	2,762	139	853	1,233	2,225	536	3.72
1990/91*	7.5	77.3	69.4	39.5	2,739	3,311	492	886	1,068	2,446	866	2.81
1991/92*	15.2	70.0	58.1	34.6	2,013	2,918	350	915	1,100	2,365	553	2.70–2.90
	Mil. acres			Lb./acre				Mil. cwt (rough equiv.)				$/cwt
Rice												
1986/87	1.48	2.38	2.36	5,851	133.4	213.3	—	6/ 77.7	84.2	161.9	51.4	3.75
1987/88	1.57	2.36	2.33	5,555	129.6	184.0	—	6/ 80.4	72.2	152.6	31.4	7.27
1988/89	1.09	2.83	2.80	5,514	159.9	195.0	—	6/ 82.3	85.9	168.2	26.7	8.83
1989/90*	1.18	2.73	2.69	5,749	164.5	185.4	—	6/ 82.4	76.8	159.2	26.3	7.35
1990/91*	1.02	2.89	2.81	5,507	154.9	185.8	—	6/ 90.3	71.0	161.3	24.5	6.60–6.80
1991/92*	0.56	2.87	2.83	5,563	157.5	187.0	—	6/ 92.8	70.0	162.8	24.2	6.50–7.50
	Mil. acres			Bu./acre				Mil. bu.				$/bu.
Corn												
1986/87	14.3	76.6	68.9	119.4	8,226	12,267	4,701	1,192	1,492	7,385	4,882	1.50
1987/88	23.1	66.2	59.5	119.8	7,131	12,016	4,812	1,229	1,716	7,757	4,259	1.94
1988/89	20.5	67.7	58.3	84.6	4,929	9,191	3,981	1,251	2,025	7,260	1,930	2.54
1989/90*	10.8	72.2	64.7	116.3	7,525	9,458	4,455	1,290	2,369	8,113	1,344	2.36
1990/91*	10.7	74.2	67.0	118.5	7,933	9,280	4,700	1,325	1,725	7,750	1,530	2.30
1991/92*	7.3	75.9	68.7	106.1	7,295	8,827	4,725	1,350	1,650	7,725	1,102	2.40–2.80
	Mil. acres			Bu./acre				Mil. bu.				$/bu.
Sorghum												
1986/87	2.9	15.3	13.9	67.7	939	1,490	536	12	198	746	743	1.37
1987/88	4.1	11.8	10.5	69.4	731	1,474	555	25	232	812	663	1.70
1988/89	3.9	10.3	9.0	63.8	577	1,239	468	22	310	800	440	2.27
1989/90*	3.3	12.6	11.1	55.4	615	1,055	517	15	304	835	220	2.10
1990/91*	3.3	10.5	9.1	62.9	571	791	400	14	220	634	157	2.10
1991/92*	2.3	11.0	9.7	56.2	548	705	390	15	190	595	110	2.25–2.65
	Mil. acres			Bu./acre				Mil. bu.				$/bu.
Barley												
1986/87	2.0	13.0	12.0	50.8	609	942	298	174	134	606	336	1.81
1987/88	2.8	10.9	10.0	52.4	521	869	253	174	121	548	321	1.81
1988/89	2.8	9.8	7.6	38.0	290	622	166	180	79	425	196	2.80
1989/90*	2.3	9.1	8.3	48.8	404	614	190	179	84	453	161	2.42
1990/91*	2.9	8.2	7.5	55.9	419	595	195	184	80	459	136	2.14
1991/92*	2.1	8.9	8.4	55.5	468	619	215	175	85	475	144	1.95–2.25
	Mil. acres			Bu./acre				Mil. bu.				$/bu.
Oats												
1986/87	0.5	14.7	6.8	56.3	385	601	385	83	1	468	133	1.21
1987/88	0.8	17.9	6.9	54.3	374	552	358	81	1	440	112	1.56
1988/89	0.3	13.9	5.5	39.3	218	393	194	100	1	294	98	2.61
1989/90*	0.4	12.1	6.9	54.3	374	538	265	115	1	381	157	1.49
1990/91*	0.2	10.4	5.9	60.1	357	585	293	120	1	414	171	1.14
1991/92*	0.5	8.6	5.0	52.2	260	488	250	125	1	376	110	1.10–1.30
	Mil. acres			Bu./acre				Mil. bu.				$/bu.
Soybeans												
1986/87	0	60.4	58.3	33.3	1,943	2,479	7/ 106	1,179	757	2,042	436	4.76
1987/88	0	58.2	57.2	33.9	1,938	2,375	7/ 97	1,174	802	2,073	302	5.88
1988/89	0	58.8	57.4	27.0	1,549	1,855	7/ 88	1,058	527	1,673	182	7.42
1989/90*	0	60.8	59.5	32.3	1,924	2,109	7/ 101	1,146	623	1,870	239	5.69
1990/91*	0	57.8	56.5	34.0	1,922	2,163	7/ 98	1,185	560	1,843	320	5.75
1991/92*	0	59.8	58.6	31.0	1,817	2,142	7/ 97	1,195	600	1,892	250	5.25–6.75
								Mil. lbs.				8/ Cts./lb.
Soybean oil												
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,974	14,895	—	10,930	1,873	12,803	2,092	22.67
1988/89	—	—	—	—	11,737	13,967	—	10,591	1,661	12,252	1,715	21.10
1989/90*	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91*	—	—	—	—	13,250	14,570	—	12,000	700	12,700	1,870	21.00
1991/92*	—	—	—	—	13,380	15,250	—	12,100	900	13,000	2,250	17.5–20.5
								1,000 tons				9/ $/ton
Soybean meal												
1986/87	—	—	—	—	27,758	27,970	—	20,387	7,343	27,730	240	183
1987/88	—	—	—	—	28,060	28,300	—	21,293	6,854	28,147	153	222
1988/89	—	—	—	—	24,943	25,100	—	19,657	5,270	24,927	173	233
1989/90*	—	—	—	—	27,719	27,900	—	22,558	5,024	27,582	318	174
1990/91*	—	—	—	—	28,142	28,460	—	22,880	5,200	28,080	400	170
1991/92*	—	—	—	—	28,395	28,800	—	23,000	5,500	28,500	300	165–195

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area												
	Set Aside 3/	Planted	Harvested	Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks		Farm price 5/
	Mil. acres			Lb./acre			Mil. bales						
Cotton 10/													
1986/87	4.2	10.0	8.5	552	9.7	19.1	—	7.5	6.7	14.1	5.0		52.40
1987/88	4.0	10.4	10.0	706	14.8	19.8	—	7.8	6.6	14.2	5.8		64.30
1988/89	2.2	12.5	11.9	619	15.4	21.2	—	7.8	6.1	13.9	7.1		56.60
1989/90*	3.5	10.6	9.5	614	12.2	19.3	—	8.8	7.7	16.5	3.0		66.20
1990/91*	2.0	12.3	11.7	634	15.5	18.5	—	8.6	7.9	16.5	2.2		67.80
1991/92*	0.9	14.1	13.4	638	17.9	20.0	—	8.8	7.0	15.8	4.4	11/	

*September 12, 1991 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soymeal & soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, & 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, acreage reduction, 50-92, & 0-92 programs. Data for 1991/92 are preliminary. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. 11/ USDA is prohibited from publishing cotton price projections. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Wholesale Prices, Selected U.S. Commodities

	Marketing year 1/				1990	1991				
	1986/87	1987/88	1988/89	1989/90	July	Mar	Apr	May	June	July
Wheat, No. 1 HRW, Kansas City ($/bu.) 2/	2.72	2.96	4.17	4.22	3.11	2.94	2.98	3.04	2.99	2.91
Wheat, DNS, Minneapolis ($/bu.) 3/	3.07	3.15	4.36	4.16	3.56	3.00	3.07	3.10	3.04	2.94
Rice, S.W. La. ($/cwt) 4/	10.25	19.25	14.65	15.55	15.30	15.75	16.40	16.50	17.25	16.95
Corn, no. 2 yellow, 30 day, Chicago ($/bu.)	1.64	2.14	2.68	2.52	2.73	2.52	2.59	2.50	2.43	2.40
Sorghum, no. 2 yellow, Kansas City ($/cwt)	2.73	3.40	4.17	4.24	4.82	4.35	4.34	4.13	4.02	4.05
Barley, feed, Duluth ($/bu.) 5/	1.44	1.78	2.32	2.20	2.17	2.14	2.12	2.13	2.02	1.89
Barley, malting, Minneapolis ($/bu.)	1.89	2.04	4.11	3.20	2.38	2.46	2.48	2.41	2.26	2.14
U.S. price, SLM, 1-1/16 in. (cts./lb.) 6/	53.2	63.1	57.7	69.8	79.5	77.9	79.9	83.9	79.1	71.3
Northern Europe prices index (cts./lb.) 7/	62.0	72.3	66.4	82.3	90.9	83.7	83.2	84.4	83.8	80.7
U.S. M 1-3/32 in. (cts./lb.) 8/	61.8	76.3	69.2	83.6	95.9	94.7	96.8	99.3	—	—
Soybeans, no. 1 yellow, Chicago ($/bu.)	5.03	6.67	7.41	5.86	6.05	5.78	6.84	5.71	5.65	5.39
Soybean oil, crude, Decatur (cts./lb.)	15.40	22.70	21.10	22.30	24.70	22.20	21.50	20.20	19.70	19.10
Soybean meal, 44% protein, Decatur ($/ton)	162.70	221.90	233.00	173.75	171.30	165.80	171.50	171.00	171.10	169.70

1/ Beginning June 1 for wheat & barley; Aug. 1 for rice & cotton; Sept. 1 for corn, sorghum & soybeans; Oct. 1 for soymeal & oil. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Beginning Mar. 1987 reporting point changed from Minneapolis to Duluth. 6/ Average spot market. 7/ Liverpool Cotlook (A) index; average of five lowest prices of 11 selected growths. 8/ Memphis territory growths. — = not available.

Information contact: Joy Harwood (202) 219-0840.

Table 19.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate 1/	Payment rates: Deficiency	Payment rates: Paid land diversion: Mandatory	Payment rates: Paid land diversion: Optional	Effective base acres 2/	Program 3/	Participation rate 4/
	$/bu.						Mil. acres	Percent of base	Percent of base
Wheat									
1985/86	4.38	3.30	—	1.08	2.70	—	94.9	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	1.10	2.00	91.6	22.5/2.5/5-10	85
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.78	2.21	0.69	—	—	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.06	0.32	—	—	82.3	10/0/0	78
1990/91 6/	4.00	2.44	1.95	1.28	—	—	80.5	7/ 5/0/0	83
1991/92	4.00	2.52	2.04	1.47	—	—	79.3	15/0/0	85
1992/93	4.00	—	—	—	—	—	—	5/0/0	—
	$/cwt								
Rice									
1985/86	11.90	8.00	8/ 3.16	3.90	3.50	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	8/ 3.94	4.70	—	—	4.2	35/0/0	94
1987/88	11.66	6.84	8/ 5.79	4.82	—	—	4.2	35/0/0	96
1988/89	11.15	6.63	8/ 6.21	4.31	—	—	4.2	25/0/0	94
1989/90	10.80	6.50	8/ 5.71	3.56	—	—	4.2	25/0/0	95
1990/91 6/	10.71	6.50	8/ 5.06	4.21	—	—	4.2	20/0/0	94
1991/92	10.71	6.50	—	3.76	—	—	4.2	5/0/0	95
	$/bu.								
Corn									
1985/86	3.03	2.55	—	0.48	—	—	84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	86
1987/88	3.03	2.28	1.82	1.09	0.73	2.00	81.5	20/0/15	91
1988/89	2.93	2.21	1.77	0.36	—	1.75	82.9	20/0/10	87
1989/90	2.84	2.06	1.65	0.58	—	—	82.7	10/0/0	80
1990/91 6/	2.75	1.96	1.57	0.53	—	—	82.6	10/0/0	77
1991/92	2.75	1.89	1.62	0.58	—	—	82.9	7.5/0/0	77
	$/bu.								
Sorghum									
1985/86	2.89	2.42	—	0.46	—	—	19.3	9/ (same)	55
1986/87 5/	2.89	2.28	1.82	1.06	0.65	—	19.0	—	74
1987/88	2.88	2.17	1.74	1.14	—	1.90	17.4	—	85
1988/89	2.78	2.10	1.68	0.48	—	1.65	16.8	—	82
1989/90	2.70	1.96	1.57	0.66	—	—	16.2	—	71
1990/91 6/	2.61	1.86	1.49	0.58	—	—	15.4	—	70
1991/92	2.61	1.80	1.54	0.56	—	—	13.5	—	77
	$/bu.								
Barley									
1985/86	2.60	2.08	—	0.52	—	—	13.3	9/ (same)	57
1986/87 5/	2.60	1.95	1.56	0.99	0.57	—	12.4	—	72
1987/88	2.60	1.86	1.49	0.79	—	1.60	12.5	—	85
1988/89	2.51	1.80	1.44	0.00	—	1.40	12.4	—	79
1989/90	2.43	1.68	1.34	0.00	—	—	12.3	—	67
1990/91 6/	2.36	1.60	1.28	0.22	—	—	11.9	—	68
1991/92	2.36	1.54	1.32	0.47	—	—	11.5	—	76
	$/bu.								
Oats									
1985/86	1.60	1.31	—	0.29	—	—	9.4	9/ (same)	14
1986/87 5/	1.60	1.23	0.99	0.39	0.36	—	9.2	—	38
1987/88	1.60	1.17	0.94	0.20	—	0.80	8.4	—	45
1988/89	1.55	1.14	0.90	0.00	—	—	7.9	5/0/0	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.6	5/0/0	18
1990/91 6/	1.45	1.01	0.81	0.33	—	—	7.5	5/0/0	09
1991/92	1.45	0.97	0.83	0.15	—	—	7.3	0/0/0	38
	$/bu.								
Soybeans 10/									
1985/86	—	5.02	—	—	—	—	—	—	—
1986/87 5/	—	4.77	—	—	—	—	—	—	—
1987/88	—	4.77	—	—	—	—	—	—	—
1988/89	—	4.77	—	—	—	—	—	—	—
1989/90	—	4.53	—	—	—	—	—	11/ 10/25	—
1990/91 6/	—	4.50	—	—	—	—	—	11/ 0/25	—
1991/92	—	5.02	—	—	—	—	—	11/ 0/25	—
	Cts./lb.								
Upland cotton									
1985/86	81.0	57.30	57.30	23.70	30.00	—	15.9	20/10/0	82
1986/87 5/	81.0	55.00	12/ 44.00	26.00	—	—	15.5	25/0/0	92
1987/88	79.4	52.25	13/ 60.00	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	13/ 51.89	19.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	13/ 65.05	13.1	—	—	14.6	25/0/0	89
1990/91 6/	72.9	50.27	13/ 53.00	7.3	—	—	14.4	12.5/0/0	86
1991/92 14/	72.9	50.77	13/ —	19.0	—	—	14.6	5/0/0	84

1/ There are no Findley loan rates for rice or cotton. See footnotes 8/, 12/, and 13/. 2/ National effective crop acreage base as determined by ASCS. Net of CRP. 3/ Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4/ Percentage of effective base acres enrolled in acreage reduction programs. 5/ Payments and loans received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Payments and loans were reduced by 1.4 percent in 1990/91 due to Gramm-Rudman-Hollings. Budget Reconciliation Act reductions to deficiency payments rates were also in effect in that year. Data do not include these reductions. 7/ Under 1990 modified contracts, participating producers plant up to 105 percent of their wheat base acres. For every acre planted above 95 percent of base, the acreage used to compute deficiency payments was cut by 1 acre. 8/ A marketing loan has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). However, loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to annual average adjusted world prices. 9/ The sorghum, oats, and barley programs are the same as for corn except as indicated. 10/ There are no target prices, base acres, acreage reduction programs, or deficiency payment rates for soybeans. 11/ Nominal percentage of program crop base acres permitted to shift into soybeans without loss of base. 12/ A marketing loan has been in effect for cotton since 1986/87. The loan repayment rate was fixed at 80 percent of the loan rate in 1986/87 (Plan A). 13/ In 1987/88 and after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid at less than 70 percent of the loan rate. Data refer to annual average adjusted world prices. 14/ A marketing certificate program was implemented on Aug. 1, 1991.

Information contact: Joy Harwood (202) 219-0840.

Table 20.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/									
Production (1,000 ton)	12,139	13,682	10,832	10,525	11,058	11,993	12,761	13,186	10,845
Per capita consumpt. (lbs.) 2/	24.8	29.5	24.0	22.6	26.0	25.8	26.4	25.4	22.4
Noncitrus 3/									
Production (1,000 tons)	14,658	14,168	14,301	14,191	13,874	16,011	15,893	16,321	15,572
Per capita consumpt. (lbs.) 2/	62.6	63.6	67.7	66.7	69.8	75.4	72.7	74.3	69.8

	1990		1991						
	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
F.o.b. shipping point prices									
Apples ($/carton) 4/	13.00	13.08	14.06	14.00	14.00	14.00	14.00	14.00	14.00
Pears ($/box) 5/	12.56	13.00	14.00	13.85	13.48	13.74	15.12	18.90	—
Grower prices									
Oranges ($/box) 6/	6.31	6.18	6.62	5.98	7.41	7.37	7.95	21.35	19.48
Grapefruit ($/box) 6/	5.53	5.63	5.66	4.50	5.43	5.10	4.91	5.44	4.82
Stocks, ending									
Fresh apples (mil. lbs.)	4,003.7	3,378.3	2,694.8	2,100.7	1,569.8	1,060.9	690.7	385.8	163.0
Fresh pears (mil. lbs.)	322.6	266.2	191.1	145.4	95.0	50.8	14.7	—	12.8
Frozen fruits (mil. lbs.)	864.5	838.0	760.7	679.6	635.2	566.7	549.8	590.6	762.6
Frozen orange juice (mil. lbs.)	871.3	1,031.6	1,195.8	1,199.5	1,236.7	1,363.2	1,304.7	1,110.6	967.7

1/ 1990 indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact. Wynnice Napper (202) 219–0884

Table 21.—Vegetables

	Calendar year									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Production										
Total vegetables (1,000 cwt)	392,343	430,795	403,509	456,334	453,030	448,629	478,381	468,779	542,437	561,768
Fresh (1,000 cwt) 1/ 3/	183,456	193,451	185,782	201,817	203,549	203,165	220,539	228,397	239,281	239,114
Processed (tons) 2/ 3/	10,444,330	11,867,170	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,790	16,132,660
Mushrooms (1,000 lbs.)	517,146	490,826	561,531	595,681	587,956	614,393	631,619	667,759	715,010	—
Potatoes (1,000 cwt)	340,623	355,131	333,726	362,039	406,609	361,743	389,320	356,438	370,444	393,667
Sweetpotatoes (1,000 cwt)	12,799	14,833	12,083	12,902	14,573	12,368	11,611	10,945	11,358	13,020
Dry edible beans (1,000 cwt)	32,751	25,563	15,520	21,070	22,176	22,886	26,031	19,253	23,729	32,429

	1990			1991						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Shipments										
Fresh (1,000 cwt) 4/	20,451	17,623	17,112	23,352	19,405	19,215	20,661	30,842	26,747	29,105
Potatoes (1,000 cwt)	11,947	11,405	10,434	14,681	11,322	12,337	14,497	15,695	10,395	10,720
Sweetpotatoes (1,000 cwt)	562	929	545	399	400	486	283	291	188	151

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons. — = not available.

Information contacts: Gary Lucier or Cathy Greene (202) 219–0884.

Table 22.—Other Commodities

	Annual					1990			1991	
	1986	1987	1988	1989	1990	Apr–June	July–Sept	Oct–Dec	Jan–Mar	Apr–June
Sugar										
Production 1/	6,257	7,309	7,087	6,840	6,319	572	652	3,419	2,206	626
Deliveries 1/	7,786	8,167	8,188	8,309	8,633	2,056	2,318	2,315	2,019	2,103
Stocks, ending 1/	3,225	3,195	3,132	2,946	2,642	2,165	1,210	2,729	3,530	2,487
Coffee										
Composite green price N.Y. (cts./lb.)	185.18	109.14	115.59	95.17	76.93	78.55	79.10	76.85	74.94	72.13
Imports, green bean equiv. (mil. lbs.) 2/	2,596	2,638	2,072	2,630	2,714	702	530	616	748	563

	Annual			1990						1991
	1988	1989	1990	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Tobacco										
Prices at auctions 3/										
Flue–cured ($/lb.)	1.61	—	—	—	—	1.73	1.72	1.65	—	—
Burley ($/lb.)	1.61	—	1.71	1.67	—	—	—	1.75	1.75	1.78
Domestic consumption 4/										
Cigarettes (bil.)	562.5	540.1	523.1	38.4	49.9	43.3	44.0	45.6	34.1	34.5
Large cigars (mil.)	2,531	2,487.6	2,343.4	158.6	210.8	195.5	191.1	209.6	157.9	152.1

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July–June for flue–cured. Oct.–Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: sugar, Peter Buzzanell (202) 219–0886, coffee, Fred Gray (202) 219–0888, tobacco, Verner Grise (202) 219–0890.

World Agriculture

Table 23.—World Supply & Utilization of Major Crops, Livestock & Products

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 P	1991/92 F
				Million units			
Wheat							
Area (hectares)	230.1	228.3	220.0	218.0	226.3	231.9	223.4
Production (metric tons)	501.0	531.1	502.3	501.4	537.6	563.8	550.9
Exports (metric tons) 1/	85.0	90.7	104.9	97.2	96.2	93.4	105.8
Consumption (metric tons) 2/	497.1	523.0	530.3	532.0	534.4	571.5	558.4
Ending stocks (metric tons) 3/	168.2	176.4	148.4	117.9	121.1	143.4	135.9
Coarse grains							
Area (hectares)	342.0	336.9	324.5	326.1	321.0	319.0	320.4
Production (metric tons)	844.2	833.0	794.8	733.2	800.3	834.7	795.1
Exports (metric tons) 1/	83.2	83.7	82.9	94.2	100.0	84.6	83.0
Consumption (metric tons) 2/	779.9	807.2	815.2	797.5	825.2	822.8	811.3
Ending stocks (metric tons) 3/	208.2	234.0	213.6	149.3	124.4	136.4	120.2
Rice, milled							
Area (hectares)	145.0	145.4	141.8	145.6	146.4	146.9	147.0
Production (metric tons)	318.9	318.7	314.2	330.9	344.6	352.3	345.8
Exports (metric tons) 4/	12.6	12.9	11.9	15.1	12.0	12.6	12.9
Consumption (metric tons) 2/	319.7	323.0	320.2	328.7	338.1	348.6	346.8
Ending stocks (metric tons) 3/	55.4	51.4	45.6	47.9	54.5	58.2	57.2
Total grains							
Area (hectares)	717.1	710.6	686.3	689.7	693.7	697.8	690.8
Production (metric tons)	1,664.1	1,682.8	1,611.3	1,565.5	1,682.5	1,780.8	1,691.8
Exports (metric tons) 1/	180.8	187.3	199.7	206.5	208.2	190.6	201.7
Consumption (metric tons) 2/	1,596.7	1,653.2	1,665.7	1,658.2	1,697.7	1,742.9	1,716.5
Ending stocks (metric tons) 3/	431.8	461.8	407.6	315.1	300.0	338.0	313.3
Oilseeds							
Crush (metric tons)	155.1	161.8	168.5	186.4	173.2	177.3	178.5
Production (metric tons)	196.2	194.9	210.6	204.2	214.1	216.8	218.7
Exports (metric tons)	34.5	37.7	39.5	32.0	35.9	34.4	34.6
Ending stocks (metric tons)	26.8	23.3	24.0	22.2	23.3	21.8	21.3
Meals							
Production (metric tons)	105.0	110.7	115.4	112.2	117.9	119.8	120.6
Exports (metric tons)	34.4	36.7	35.8	37.7	38.8	39.1	38.8
Oils							
Production (metric tons)	49.4	50.4	53.3	53.9	57.6	58.4	59.9
Exports (metric tons)	16.4	16.9	17.5	18.3	20.0	19.8	19.9
Cotton							
Area (hectares)	31.7	29.5	31.0	33.7	31.6	33.3	34.8
Production (bales)	80.4	70.7	81.0	84.7	80.0	87.0	91.6
Exports (bales)	20.3	26.0	23.2	25.9	24.0	23.6	23.4
Consumption (bales)	76.9	82.8	84.1	85.3	86.6	85.5	88.0
Ending stocks (bales)	48.5	35.9	32.8	32.0	26.4	27.7	31.0

	1985	1986	1987	1988	1989	1990 P	1991 F
Red meat							
Production (metric tons)	105.5	108.6	111.5	115.2	116.9	116.3	116.7
Consumption (metric tons)	103.4	107.4	109.7	113.4	115.2	116.8	118.1
Exports (metric tons) 1/	6.3	6.7	6.7	6.9	7.4	6.9	7.2
Poultry 5/							
Production (metric tons)	26.2	29.3	31.3	32.9	34.2	35.7	37.2
Consumption (metric tons)	25.8	28.9	30.8	32.5	33.8	35.1	36.6
Exports (metric tons) 1/	1.2	1.2	1.5	1.7	1.8	2.1	2.2
Dairy							
Milk production (metric tons)	413.4	425.9	425.9	429.1	435.0	440.9	442.0

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1986 data correspond with 1985/86, etc. 5/ Poultry excludes the Peoples Republic of China before 1986.
P = preliminary. F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 24.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1990	1991					
	1988	1989	1990	July	Feb	Mar	Apr	May	June	July
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu.)	3.97	4.65	3.72	3.41	3.13	3.28	3.31	3.35	3.29	3.22
Corn, f.o.b. vessel, Gulf ports ($/bu.)	2.73	2.85	2.79	2.93	2.74	2.79	2.81	2.70	2.66	2.69
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu.)	2.52	2.70	2.65	2.79	2.72	2.80	2.79	2.62	2.51	2.56
Soybeans, f.o.b. vessel, Gulf ports ($/bu.)	7.81	7.06	6.24	6.32	6.08	6.14	6.20	6.09	6.03	5.79
Soybean oil, Decatur (cts./lb.)	23.52	20.21	22.75	24.54	21.48	22.20	21.46	20.29	19.55	18.87
Soybean meal, Decatur ($/ton)	234.75	216.59	189.37	171.30	164.01	165.70	171.32	171.14	171.43	169.70
Cotton, 8-market avg. spot (cts./lb.)	57.25	63.78	71.25	79.53	77.69	77.92	79.93	83.94	79.05	71.33
Tobacco, avg. price at auction (cts./lb.)	147.82	161.74	166.06	160.89	171.70	170.89	171.12	171.12	171.12	170.66
Rice, f.o.b. mill, Houston ($/cwt)	19.60	15.68	15.52	16.25	16.00	16.00	16.00	16.00	17.00	17.00
Inedible tallow, Chicago (cts./lb.)	16.64	14.71	13.54	13.50	12.91	13.63	13.57	12.25	12.36	12.25
Import commodities										
Coffee, N.Y. spot ($/lb.)	1.21	1.04	0.81	0.78	0.80	0.82	0.80	0.76	0.71	0.68
Rubber, N.Y. spot (cts./lb.)	59.20	50.65	46.28	45.80	48.92	49.09	45.92	45.16	45.26	44.59
Cocoa beans, N.Y. ($/lb.)	0.69	0.55	0.55	0.58	0.53	0.53	0.50	0.47	0.45	0.45

Information contact: Mary Teymourian (202) 219-0824.

Table 25.—Indexes of Real Trade-Weighted Dollar Exchange Rates 1/

	1990				1991							
	Sept	Oct	Nov	Dec	Jan	Feb	Mar P	Apr P	May P	June P	July P	Aug P
					1985 = 100							
Total U.S. trade 2/	63.1	61.1	60.1	60.8	61.0	59.8	63.5	66.4	66.8	68.9	69.0	70.5
Agricultural trade												
U.S. markets	78.2	76.4	75.5	76.1	76.2	75.2	77.0	78.5	76.7	79.8	79.7	80.3
U.S. competitors	75.3	75.0	73.7	73.9	75.3	74.2	75.5	76.5	76.8	77.4	77.9	78.5
Wheat												
U.S. markets	95.8	95.0	94.2	95.6	96.5	95.4	96.0	96.6	97.3	98.3	98.6	99.3
U.S. competitors	70.6	69.6	68.6	68.0	69.2	68.7	70.3	71.1	71.1	71.7	72.0	72.5
Soybeans												
U.S. markets	65.9	63.9	63.1	63.7	64.0	62.8	65.2	68.0	68.4	70.0	69.8	70.9
U.S. competitors	58.2	57.9	54.0	53.1	59.0	57.7	56.9	57.1	57.4	57.5	57.4	57.4
Corn												
U.S. markets	71.8	69.7	69.1	69.9	69.9	68.6	70.9	71.7	72.0	73.0	72.5	73.0
U.S. competitors	65.2	61.4	58.3	57.1	61.3	60.7	63.1	64.7	65.0	66.0	66.5	67.4
Cotton												
U.S. markets	74.5	72.5	72.1	72.9	73.0	72.0	74.1	74.6	74.8	75.7	75.6	76.1
U.S. competitors	89.2	88.0	85.9	85.1	84.8	83.3	82.1	81.8	81.4	80.9	80.1	79.4

1/ Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. 2/ Federal Reserve Board index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

Table 26.—Trade Balance

	Fiscal year 1/								June
	1984	1985	1986	1987	1988	1989	1990	1991 F	1991
					$ million				
Exports									
Agricultural	38,027	31,201	26,312	27,876	35,316	39,637	40,182	37,500	2,653
Nonagricultural	170,014	179,236	179,291	202,911	258,656	301,222	325,928	—	31,093
Total 2/	208,041	210,437	205,603	230,787	293,972	340,859	366,110	—	33,746
Imports									
Agricultural	18,916	19,740	20,884	20,650	21,014	21,477	22,514	22,500	1,884
Nonagricultural	297,736	313,722	342,846	367,374	409,138	441,074	458,147	—	37,552
Total 3/	316,652	333,462	363,730	388,024	430,152	462,551	480,661	—	39,436
Trade balance									
Agricultural	19,111	11,461	5,428	7,226	14,302	18,160	17,668	15,000	769
Nonagricultural	-127,722	-134,486	-163,555	-164,463	-150,482	-139,852	-132,219	—	-6,459
Total	-108,611	-123,025	-158,127	-157,237	-136,180	-121,692	-114,551	—	-5,690

1/ Fiscal years begin October 1 & end September 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 27.—U.S. Agricultural Exports & Imports

	Fiscal year*			June	Fiscal year*			June
	1989	1990	1991 F	1991	1989	1990	1991 F	1991
			1,000 units				$ million	
EXPORTS								
Animals, live (no.) 1/	758	685	—	109	475	361	—	28
Meats & preps., excl. poultry (mt)	869	876	2/ 700	76	2,355	2,457	—	226
Dairy products (mt) 1/	192	92	—	3	475	348	400	25
Poultry meats (mt)	428	567	600	48	510	631	—	60
Fats, oils, & greases (mt)	1,377	1,264	1,100	109	531	459	—	37
Hides & skins incl. furskins	—	—	—	—	1,713	1,796	—	113
Cattle hides, whole (no.) 1/	26,260	24,777	—	1,701	1,360	1,365	—	95
Mink pelts (no.) 1/	3,073	5,128	—	225	91	116	—	4
Grains & feeds (mt)	114,692	112,987	—	5,748	16,821	15,694	3/ 12,500	775
Wheat (mt)	37,641	27,999	27,000	1,530	6,004	4,209	4/ 3,000	187
Wheat flour (mt)	1,176	882	1,000	190	255	203	—	32
Rice (mt)	3,041	2,501	2,400	131	955	829	800	44
Feed grains, incl. products (mt)	60,958	69,510	51,700	2,617	7,374	8,093	5,700	316
Feeds & fodders (mt)	11,086	11,125	5/ 11,400	974	1,849	1,826	—	159
Other grain products (mt)	790	970	—	106	384	534	—	57
Fruits, nuts, & preps. (mt)	2,555	2,873	—	219	2,394	2,789	—	263
Fruit juices incl. froz. (1,000 hectoliters) 1/	4,997	5,975	—	600	264	328	—	33
Vegetables & preps. (mt)	1,665	2,243	—	230	1,542	2,079	—	234
Tobacco, unmanufactured (mt)	212	220	200	16	1,274	1,373	1,500	111
Cotton, excl. linters (mt)	1,441	1,666	1,800	85	2,040	2,704	3,000	143
Seeds (mt)	511	576	—	10	507	576	600	17
Sugar, cane or beet (mt)	368	447	—	32	134	187	—	12
Oilseeds & products (mt)	21,052	23,772	—	1,420	6,629	6,098	5,700	365
Oilseeds (mt)	14,592	17,703	—	1,039	4,363	4,246	—	261
Soybeans (mt)	14,093	17,217	15,200	994	4,085	3,939	3,500	226
Protein meal (mt)	4,963	4,767	—	334	1,358	1,022	—	67
Vegetable oils (mt)	1,498	1,302	—	48	908	830	—	38
Essential oils (mt)	13	14	—	1	171	182	—	15
Other	106	89	—	7	1,802	2,120	—	196
Total	145,481	147,686	129,000	8,004	39,637	40,182	37,500	2,653
IMPORTS								
Animals, live (no.) 1/	2,485	2,940	—	214	740	1,053	1,200	69
Meats & preps., excl. poultry (mt)	1,091	1,142	—	113	2,432	2,848	—	289
Beef & veal (mt)	668	754	800	81	1,525	1,842	1,800	206
Pork (mt)	371	340	340	27	778	888	900	72
Dairy products (mt) 1/	211	254	—	24	834	951	800	77
Poultry & products 1/	—	—	—	—	130	129	—	10
Fats, oils, & greases (mt)	14	19	—	3	14	15	—	2
Hides & skins, incl. furskins 1/	—	—	—	—	241	135	—	19
Wool, unmanufactured (mt)	62	47	—	5	319	187	—	14
Grains & feeds (mt)	3,467	3,471	3,800	391	1,139	1,181	1,200	110
Fruits, nuts, & preps., excl. juices (mt)	5,036	5,331	5,345	476	2,269	2,486	—	248
Bananas & plantains (mt)	3,039	3,236	3,275	283	851	926	1,000	83
Fruit juices (1,000 hectoliters) 1/	27,747	33,922	30,000	2,271	792	1,001	—	70
Vegetables & preps. (mt)	2,217	2,242	—	129	1,959	2,264	2,100	171
Tobacco, unmanufactured (mt)	169	193	220	24	521	588	600	77
Cotton, unmanufactured (mt)	13	30	—	1	8	20	—	1
Seeds (mt)	158	171	165	4	187	164	200	10
Nursery stock & cut flowers 1/	—	—	—	—	466	519	—	27
Sugar, cane or beet (mt)	1,657	1,769	—	189	620	734	—	73
Oilseeds & products (mt)	1,917	2,034	—	167	946	964	1,000	79
Oilseeds (mt)	424	534	—	42	159	206	—	13
Protein meal (mt)	359	310	—	35	65	48	—	5
Vegetable oils (mt)	1,133	1,189	—	89	721	710	—	61
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,567	13,543	—	1,161	1,815	1,867	—	151
Coffee, tea, cocoa, spices	1,867	2,202	3,150	146	3,896	3,465	—	230
Coffee, incl. products (mt)	1,084	1,290	1,150	61	2,467	1,997	1,900	105
Cocoa beans & products (mt)	564	698	650	66	969	1,042	1,000	85
Rubber & allied gums (mt)	927	840	820	58	1,051	712	700	49
Other	—	—	—	—	1,097	1,229	—	107
Total	—	—	—	—	21,477	22,514	22,500	1,884

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/–6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219–0822.

Table 28.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			June	Change from year* earlier			June
	1989	1990	1991 F	1991	1989	1990	1991 F	1991
	$ million				Percent			
WESTERN EUROPE	7,074	7,331	7,100	475	-12	4	-3	14
European Community (EC-12)	6,565	6,838	6,600	446	-12	4	-3	18
Belgium-Luxembourg	431	431	—	35	1	0	—	60
France	474	469	—	35	-16	-1	—	17
Germany, Fed. Rep.	918	1,096	—	64	-28	19	—	0
Italy	609	704	—	49	-15	16	—	31
Netherlands	1,847	1,637	—	110	-12	-11	—	20
United Kingdom	736	761	—	67	-10	3	—	21
Portugal	307	338	—	26	-10	10	—	9
Spain, incl. Canary Islands	876	991	—	44	3	13	—	46
Other Western Europe	510	493	500	29	-2	-3	0	-23
Switzerland	166	171	—	13	-14	3	—	-31
EASTERN EUROPE	422	533	300	11	-24	26	-40	-47
German Dem. Rep.	72	58	—	0	8	-20	—	-100
Poland	45	101	—	2	-73	124	—	172
Yugoslavia	76	129	—	2	-28	69	—	-3
Romania	62	210	—	7	-33	239	—	-59
USSR	3,299	2,989	1,900	34	70	-9	-37	-91
ASIA	18,677	18,131	16,500	1,130	17	-3	-9	-20
West Asia (Mideast)	2,273	1,995	1,800	79	19	-12	-10	-46
Turkey	238	259	—	4	97	9	—	-66
Iraq	791	497	0	0	8	-37	-100	-100
Israel, incl. Gaza & W. Bank	331	285	—	18	-1	-14	—	-36
Saudi Arabia	482	502	600	29	4	4	20	-38
South Asia	1,161	729	—	21	44	-37	—	-70
Bangladesh	213	125	—	1	98	-41	—	-94
India	243	115	—	6	-31	-53	—	-38
Pakistan	599	391	100	14	117	-35	-75	-64
China	1,496	909	700	56	144	-39	-22	-14
Japan	8,148	8,106	7,800	581	12	-1	-4	-3
Southeast Asia	976	1,184	—	74	-4	21	—	-19
Indonesia	216	277	—	14	-9	28	—	-49
Philippines	344	351	400	25	0	2	0	-5
Other East Asia	4,623	5,207	4,700	319	7	13	-10	-29
Taiwan	1,594	1,818	1,700	133	1	14	-6	-17
Korea, Rep.	2,453	2,703	2,200	128	9	10	-19	-45
Hong Kong	575	685	800	55	18	19	14	-6
AFRICA	2,280	2,009	1,700	110	0	-12	-15	-13
North Africa	1,796	1,524	1,300	78	8	-15	-13	0
Morocco	216	166	—	1	12	-23	—	-78
Algeria	549	488	400	18	2	-11	-20	-48
Egypt	955	761	600	51	21	-20	-25	63
Sub-Sahara	483	484	400	32	-21	0	0	-34
Nigeria	30	32	—	3	-31	7	—	119
Rep. S. Africa	57	81	—	3	-34	43	—	-67
LATIN AMERICA & CARIBBEAN	5,437	5,156	5,400	439	24	-5	4	0
Brazil	149	105	300	13	-15	-30	200	5
Caribbean Islands	1,007	1,006	—	82	16	0	—	4
Central America	448	464	—	38	8	4	—	11
Colombia	139	147	—	12	-22	6	—	-37
Mexico	2,755	2,666	2,800	234	60	-3	4	4
Peru	81	187	—	12	-54	132	—	177
Venezuela	587	345	400	32	-2	-41	33	-29
CANADA	2,179	3,716	4,300	433	10	71	16	11
OCEANIA	268	317	300	20	13	18	0	-34
TOTAL	39,637	40,182	37,500	2,653	12	1	-8	-18
Developed countries	17,997	19,780	19,800	1,526	1	10	0	4
Less developed countries	16,423	15,970	14,800	1,022	14	-3	-7	-21
Centrally planned countries	5,217	4,431	2,900	105	68	-15	-34	-78

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. F = forecast. — = not available.
Note: Adjusted for transhipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

Farm Income

Table 29.—Farm Income Statistics

	Calendar year										
	1981	1982	1983	1984	1985	1986	1987	1988	1989'	1990	1991 F
	$ billion										
1. Farm receipts	144.1	147.2	141.3	147.1	149.4	140.2	148.3	157.3	168.6	175 8	172 to 178
Crops (incl. net CCC loans)	72.5	72.3	67.2	69.9	74.3	63.7	65.7	71.5	76.3	79.4	79 to 83
Livestock	69.2	70.3	69.6	72.9	69.8	71.5	76 0	79.5	84.2	89.7	85 to 89
Farm related 1/	2.5	4.6	4.5	4.3	5.3	5.0	6 6	6.3	8.1	6.7	6 to 8
2. Direct Government payments	1.9	3 5	9.3	8.4	7.7	11.8	16.7	14.5	10.9	9.3	8 to 9
Cash payments	1.9	3.5	4.1	4.0	7.6	8.1	6.6	7.1	9.1	8.4	7 to 8
Value of PIK commodities	0.0	0.0	5.2	4.5	0.1	3.7	10.1	7.4	1.7	0 9	0 to 1
3. Total gross farm income (4+5+6) 2/	166.3	163.5	153.2	170.2	162.9	156 5	168.3	174.4	189.7	194.4	188 to 193
4. Gross cash income (1+2)	146.0	150.6	150.6	155.5	157.2	152.0	164.9	171.8	179.5	185.1	181 to 186
5. Nonmoney income 3/	13.8	14 3	13 5	8.7	8.0	6.9	5.7	6.2	6.1	6.2	6 to 7
6. Value of inventory change	6.5	–1.4	–10.9	6.0	–2.3	–2.4	–2.3	–3 5	4.1	3.1	0 to 3
7. Cash expenses 4/	113.2	112.8	111.0	119.0	109.3	105.2	109.6	114 4	121.2	125.4	124 to 129
8. Total expenses	139.4	140.0	137.9	143.8	131.9	125.5	128.6	133.5	140.5	144.8	145 to 149
9. Net cash income (4–7)	32.8	37.9	39.5	36.6	47.9	46.7	55 3	57.4	58 3	59.7	54 to 59
10. Net farm income (3–8)	26.9	23.5	15.3	26.3	31.0	31.0	39.7	41.0	49.2	49.6	41 to 46
Deflated (1982$)	28.6	23.5	14.7	24.5	27.9	27.3	33.8	33.8	39.0	37.7	31 to 34
11. Off-farm income	35 8	36.4	37.0	39.2	55 2	54.5	56.9	57.7	57.5	—	—
12. Loan changes 5/: Real estate	9.0	3.8	2.3	–2.0	–6.4	–8.7	–7.7	–4.1	–2.1	—	—
13. 5/: Non-real estate	6.5	3.4	0.9	–0.8	–9.6	–11.0	–4.6	–0.3	0.1	—	—
14. Rental income plus monetary change	6.4	6.4	5.4	9.2	9.1	8.0	6.8	7.5	8.2	—	—
15. Capital expenditures 5/	16.8	13.3	12.7	12.5	9.2	8.5	11.1	11.1	13.0	—	—
16. Net cash flow (9+12+13+14–15)	37.8	38.2	35.3	30.4	31.9	26.6	38.7	49.5	51.7	—	—

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisities to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. — = not available.

Information contact: Robert McElroy (202) 219-0800.

Table 30.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
	$ billion										
Assets											
Real estate	785.6	750.0	753.3	661.7	586.1	542.2	578.6	599.4	605.1	614.4	623 to 633
Non-real estate	196.8	195.6	191.9	196 9	187.4	182.3	194.2	205.8	214.7	220 9	218 to 226
Livestock & poultry	53.5	53.0	49.5	49.5	46.3	47.8	58.0	62 2	66.2	69.0	70 to 74
Machinery & motor vehicles	87.0	87.5	87.4	86.0	83.8	81.9	79 4	80.6	85.8	87.0	85 to 89
Crops stored 2/	29.0	26.1	24.0	26.2	22.9	18.0	17.8	22.7	23.3	22.4	21 to 24
Purchased inputs	—	—	—	2.6	1.3	2.0	3.3	3.4	2.8	3.0	2 to 4
Financial assets	27.3	29.0	30.9	32.6	33.1	34.5	35.4	36.6	38.5	38.0	36 to 40
Total farm assets	982.4	945.6	945.2	858.6	773.5	724.5	772.8	805.2	819.8	835.0	845 to 855
Liabilities											
Real estate debt 3/	98.7	101.8	103.2	106.7	100.1	90.4	82.4	77.6	75.3	74.4	73 to 77
Non-real estate debt 4/	83.6	87.0	87.9	87.1	77.5	66.6	62.0	61.7	61.8	65.3	63 to 67
Total farm debt	182.3	188.8	191.1	193.8	177.6	157.0	144 4	139.4	137.1	140.6	137 to 143
Total farm equity	800.0	750.0	754.1	664.8	595.9	567.6	628.4	665.9	682.7	695.3	705 to 715
	Percent										
Selected ratios											
Debt-to-assets	18.6	20.0	20.2	22.6	23.0	21.7	18.7	17.3	16.7	16.7	16 to 17
Debt-to-equity	22.8	24.9	25.3	29.2	29.8	27.7	23 0	20.9	20.1	20.1	19 to 21
Debt-to-net cash income	556	498	424	530	371	331	245	245	237	232	250 to 270

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0798.

Table 31.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1989	1990	May 1991	June 1991	1989	1990	May 1991	June 1991	1989	1990	May 1991	June 1991
						$ million 2/						
NORTH ATLANTIC												
Maine	216	220	18	17	228	240	16	2	444	460	33	19
New Hampshire	65	63	5	5	73	71	5	3	139	134	11	8
Vermont	379	398	31	29	50	49	5	2	429	447	36	31
Massachusetts	113	116	10	10	321	303	17	19	434	418	28	29
Rhode Island	13	13	1	1	65	58	5	3	78	71	6	4
Connecticut	186	196	15	14	240	250	18	12	426	446	33	26
New York	1,937	1,983	155	140	917	1,023	70	75	2,854	3,006	225	215
New Jersey	197	196	17	16	464	452	36	45	662	647	54	62
Pennsylvania	2,611	2,714	214	201	992	1,053	72	70	3,602	3,767	286	270
NORTH CENTRAL												
Ohio	1,698	1,636	136	122	2,088	2,335	114	94	3,787	4,172	251	216
Indiana	1,826	2,060	156	150	2,456	2,871	148	119	4,281	4,931	304	269
Illinois	2,251	2,477	194	189	4,727	5,461	305	267	6,979	7,936	499	455
Michigan	1,311	1,398	104	107	1,611	1,785	91	69	2,923	3,183	195	176
Wisconsin	4,350	4,581	373	330	1,050	1,125	51	85	5,400	5,706	425	416
Minnesota	3,693	3,758	298	276	2,820	3,253	201	236	6,513	7,011	499	513
Iowa	5,293	5,882	373	466	3,755	4,437	301	258	9,049	10,319	674	723
Missouri	2,169	2,271	151	183	1,751	1,668	76	97	3,920	3,939	229	279
North Dakota	669	813	48	32	1,483	1,724	57	101	2,152	2,537	105	132
South Dakota	2,031	2,313	142	183	951	1,036	55	46	2,982	3,349	197	229
Nebraska	5,646	6,037	458	402	3,080	2,808	117	130	8,726	8,845	574	531
Kansas	4,416	4,896	378	354	2,132	2,099	81	157	6,548	6,995	459	510
SOUTHERN												
Delaware	503	460	43	37	159	184	8	14	662	644	51	51
Maryland	859	828	69	66	477	517	32	31	1,336	1,345	100	97
Virginia	1,345	1,379	102	94	694	741	24	41	2,039	2,120	127	135
West Virginia	250	269	21	20	60	70	2	6	310	338	23	26
North Carolina	2,510	2,653	212	219	2,082	2,214	79	105	4,593	4,867	291	325
South Carolina	554	577	46	39	680	599	23	121	1,235	1,176	69	160
Georgia	2,281	2,268	176	176	1,626	1,574	73	102	3,908	3,842	249	278
Florida	1,215	1,260	97	90	5,031	4,448	624	421	6,246	5,708	721	511
Kentucky	1,858	1,698	84	90	1,266	1,400	31	36	2,924	3,098	115	127
Tennessee	1,082	1,111	77	83	863	928	32	45	1,946	2,039	109	128
Alabama	1,975	2,083	162	160	696	655	35	65	2,671	2,737	197	225
Mississippi	1,295	1,322	109	108	981	1,111	36	55	2,276	2,433	145	163
Arkansas	2,661	2,706	212	229	1,496	1,553	34	110	4,157	4,259	246	339
Louisiana	614	637	50	58	1,094	1,284	36	35	1,708	1,921	86	93
Oklahoma	2,377	2,363	154	179	1,137	1,191	52	164	3,515	3,554	206	343
Texas	6,861	7,712	694	678	4,063	4,288	263	275	10,923	11,981	957	953
WESTERN												
Montana	929	864	54	30	625	742	46	38	1,554	1,606	101	68
Idaho	1,084	1,154	87	74	1,662	1,781	73	75	2,745	2,935	160	149
Wyoming	664	610	28	18	163	157	3	4	827	767	31	22
Colorado	2,649	3,029	248	206	1,321	1,184	59	56	3,969	4,213	307	263
New Mexico	974	1,046	68	59	485	483	30	41	1,459	1,529	98	100
Arizona	744	819	84	71	1,182	1,046	132	73	1,928	1,865	216	144
Utah	567	576	40	37	188	179	8	8	755	755	47	45
Nevada	142	218	21	17	102	115	5	4	244	333	26	21
Washington	1,233	1,396	115	106	2,457	2,420	152	205	3,689	3,816	267	311
Oregon	738	755	59	54	1,548	1,557	69	85	2,285	2,312	128	139
California	5,193	5,515	478	465	12,857	13,344	1,184	899	18,050	18,859	1,663	1,364
Alaska	9	8	1	1	20	19	1	1	29	27	2	2
Hawaii	92	88	8	8	493	499	41	41	585	588	49	49
UNITED STATES	84,131	89,623	6,875	6,696	76,761	80,364	5,034	5,049	160,893	169,987	11,909	11,745

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219–0806.

Table 32.—Cash Receipts From Farming

	Annual						1990	1991				
	1985	1986	1987	1988	1989	1990	June	Feb	Mar	Apr	May	June
						$ million						
Farm marketings & CCC loans*	144,114	135,303	141,758	151,082	160,893	169,987	12,395	11,105	12,556	12,367	11,909	11,745
Livestock & products	69,822	71,553	75,994	79,437	84,131	89,623	7,257	6,611	7,188	6,915	6,875	6,696
Meat animals	38,560	39,081	44,478	46,492	46,857	51,877	4,021	4,046	4,227	4,130	3,911	3,802
Dairy products	18,055	17,724	17,727	17,641	19,396	20,199	1,748	1,346	1,490	1,480	1,567	1,465
Poultry & eggs	11,209	12,701	11,516	12,868	15,372	15,270	1,302	1,060	1,296	1,139	1,225	1,245
Other	2,008	2,048	2,274	2,436	2,507	2,477	187	159	175	166	171	184
Crops	74,293	63,749	65,764	71,645	76,761	80,364	5,138	4,495	5,368	5,452	5,034	5,049
Food grains	8,990	5,741	5,776	7,467	8,247	7,876	1,051	251	302	291	304	906
Feed crops	22,591	16,911	14,576	14,298	17,061	19,116	1,301	1,178	1,356	1,308	1,092	1,144
Cotton (lint & seed)	3,687	3,371	4,189	4,546	5,040	5,234	84	377	252	204	150	103
Tobacco	2,699	1,894	1,816	2,083	2,415	2,736	0	41	1	18	0	0
Oil-bearing crops	12,475	10,614	11,283	13,500	11,866	12,403	401	742	846	652	518	375
Vegetables & melons	8,572	8,865	9,902	9,787	11,461	11,533	988	700	1,157	1,307	1,674	1,291
Fruits & tree nuts	6,946	7,252	8,062	9,204	9,257	9,306	629	487	465	420	342	578
Other	8,333	9,101	10,161	10,760	11,415	12,160	683	718	988	1,253	953	653
Government payments	7,704	11,813	16,747	14,460	10,887	9,298	155	493	1,745	1,238	1,054	213
Total	151,818	147,116	158,506	165,562	171,780	179,285	12,550	11,598	14,301	13,605	12,963	11,958

*Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 219–0808.

Table 33.—Farm Production Expenses

	Calendar year										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	
						$ million					
Feed purchased	18,592	20,573	19,383	16,949	17,472	17,463	20,393	21,002	20,727	20,000	to 22,000
Livestock purchased	9,684	8,818	9,487	9,184	9,758	11,842	12,764	13,138	14,737	13,000	to 15,000
Seed purchased	3,172	2,690	3,386	3,128	3,188	3,259	3,359	3,658	3,582	3,000	to 5,000
Farm-origin inputs	31,447	32,081	32,256	29,261	30,418	32,564	36,515	37,698	39,046	37,000	to 40,000
Fertilizer & lime	8,018	7,055	8,360	7,512	6,820	6,453	6,947	7,249	7,137	7,000	to 8,000
Fuels & oils	7,734	7,211	7,296	6,436	5,310	4,957	5,091	4,983	5,951	5,000	to 7,000
Electricity	2,041	1,982	2,060	1,878	1,795	2,156	2,278	1,990	1,944	1,000	to 3,000
Pesticides	4,282	3,870	4,688	4,334	4,324	4,512	4,577	5,437	5,727	5,000	to 7,000
Manufactured inputs	22,076	20,118	22,404	20,159	18,249	18,077	18,893	19,659	20,759	20,000	to 22,000
Short-term interest	11,349	10,615	10,396	8,735	7,367	6,767	6,797	6,910	6,805	7,000	to 9,000
Real estate interest 1/	10,481	10,815	10,733	9,878	9,131	8,187	7,885	7,781	7,667	6,000	to 8,000
Total interest charges	21,830	21,430	21,129	18,613	16,498	14,954	14,682	14,691	14,472	14,000	to 16,000
Repair & maintenance 1/ 2/	6,428	6,529	6,416	6,370	6,426	6,761	6,800	7,272	7,283	7,000	to 9,000
Contract & hired labor	9,306	8,838	9,201	9,949	9,466	9,981	10,441	11,211	12,662	13,000	to 15,000
Machine hire & custom work	2,025	2,213	2,566	2,354	2,099	2,105	2,350	2,674	2,634	2,000	to 4,000
Marketing, storage, & transportation	4,301	3,904	4,012	4,127	3,652	4,078	3,450	4,080	3,972	3,000	to 5,000
Misc. operating expenses 1/	9,145	10,961	10,331	10,010	9,759	11,327	11,404	12,446	12,236	10,000	to 12,000
Other operating expenses	31,204	33,442	32,525	32,809	31,402	34,252	34,445	37,582	38,669	39,000	to 43,000
Capital consumption 1/	24,189	23,758	20,847	19,299	17,788	16,740	17,075	17,553	17,545	16,000	to 19,000
Taxes 1/	4,010	4,465	4,337	4,542	4,612	4,853	4,848	5,127	5,623	5,000	to 6,000
Net rent to nonoperator landlord	5,476	8,211	8,150	7,690	6,099	7,304	7,445	7,911	8,177	8,000	to 9,000
Other overhead expenses	33,675	33,434	33,334	31,531	28,499	28,897	29,367	30,590	31,345	30,000	to 33,000
Total production expenses	140,232	139,506	141,647	132,374	125,067	128,742	133,902	140,219	144,291	145,000	to 150,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219–0804, Robert McElroy (202) 219–0800.

Table 34.—CCC Net Outlays by Commodity & Function

	Fiscal year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991 E	1992 E
	$ million									
COMMODITY/PROGRAM										
Feed grains										
Corn	5,720	-934	4,403	10,524	12,346	8,227	2,863	2,450	2,411	3,811
Grain sorghum	814	76	463	1,185	1,203	764	467	361	261	315
Barley	268	89	336	471	394	57	45	-93	62	148
Oats	11	5	2	26	17	-2	1	-5	14	26
Corn & oat products	2	6	7	5	7	7	9	8	7	8
Total feed grains	6,815	-758	5,211	12,211	13,967	9,053	3,384	2,721	2,755	4,308
Wheat	3,419	2,536	4,891	3,440	2,836	678	53	806	2,617	1,863
Rice	664	333	990	947	906	128	631	667	758	698
Upland cotton	1,363	244	1,553	2,142	1,786	666	1,461	-79	392	431
Tobacco	880	346	455	253	-346	-453	-367	-307	-237	-79
Dairy	2,528	1,502	2,085	2,337	1,166	1,295	679	505	783	419
Soybeans	288	-585	711	1,597	-476	-1,676	-66	5	102	20
Peanuts	-6	1	12	32	8	7	13	1	-4	-3
Sugar	49	10	184	214	-65	-246	-25	15	-2	-27
Honey	48	90	61	89	73	100	42	47	23	16
Wool	94	132	109	123	152	1/ 5	93	104	173	198
Operating expense 3/	328	362	346	457	535	614	620	618	634	724
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	757	573
Export programs 4/	398	743	134	102	276	200	-102	-34	567	1,322
1989/89 Disaster/ Livestock Assistance	0	0	0	0	0	0	3,919	2/ 161	146	2
Other	-1,542	1,295	-314	486	371	1,665	110	609	905	1,446
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,569	11,913
FUNCTION										
Price-support loans (net)	9,438	-27	6,272	13,628	12,199	4,579	-926	-399	267	434
Direct payments 5/										
Deficiency	2,780	612	6,302	6,166	4,833	3,971	5,798	4,178	6,203	6,695
Diversion	705	1,504	1,525	84	382	8	-1	0	0	0
Dairy termination	0	0	0	489	587	260	168	189	97	1
Other	0	0	0	27	60	0	42	3	14	16
Disaster	115	1	0	0	0	6	4	0	0	0
Total direct payments	3,600	2,117	7,827	6,746	5,862	4,245	6,011	4,370	6,314	6,712
1988/89 crop disaster	0	0	0	0	0	0	3,386	2/ 5	8	0
Emergency livestock/ forage assistance	0	0	0	0	0	31	533	156	138	2
Purchases (net)	2,540	1,470	1,331	1,670	-479	-1,131	116	-48	594	534
Producer storage payments	964	268	329	485	832	658	174	185	1	26
Processing, storage, & transportation	865	639	857	1,013	1,659	1,113	659	317	299	213
Operating expense 3/	328	362	346	457	535	614	620	618	634	724
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	757	573
Export programs 4/	398	743	134	102	276	200	-102	-34	567	1,322
Other	-1,607	679	-648	329	305	1,727	-46	669	990	1,373
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,569	11,913

1/ Fiscal 1988 wool & mohair program outlays were $130,635,000 but include a one-time advance appropriation of $126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately $1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Export Guarantee Program-Credit Reform, Direct Export Credit Program, Market Promotion Program, & CCC Transfers to the General Sales Manager. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-90. E = Estimated in the fiscal 1992 Mid-Session Review based on June, 1991 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148.

Food Expenditures

Table 35.—Food Expenditure Estimates

	Annual			1991			1991 year-to-date		
	1988	1989	1990	June	July P	Aug P	June	July P	Aug P
				$ billion					
Sales 1/									
Off-premise use 2/	255.7	272.1	286.3	25.0	25.4	25.9	143.8	169.2	195.0
Meals & snacks 3/	196.5	205.9	220.3	20.3	20.4	21.2	111.6	132.0	153.2
				1990 $ billion					
Sales 1/									
Off-premise use 2/	290.2	289.5	286.2	24.1	24.7	25.4	139.3	164.0	189.3
Meals & snacks 3/	215.2	215.6	220.2	19.7	19.7	20.4	108.7	128.4	148.8
				Percent change from year earlier ($ bil.)					
Sales 1/									
Off-premise use 2/	4.8	6.4	5.2	1.4	1.5	3.6	3.0	3.2	3.2
Meals & snacks 3/	8.7	4.8	7.0	4.0	3.7	5.3	3.7	3.7	3.9
				Percent change from year earlier (1990 $ bil.)					
Sales 1/									
Off-premise use 2/	0.6	–0.2	–1.1	–2.8	1.4	1.9	–0.8	–0.5	–0.2
Meals & snacks 3/	4.4	0.2	2.1	0.6	0.3	1.9	0.1	0.1	0.4

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug 1987.

Information contact: Aiden Manchester (202) 219-0880.

Transportation

Table 36.—Rail Rates, Grain & Fruit-Vegetable Shipments

	Annual			1990	1991					
	1988	1989	1990	July	Feb	Mar	Apr	May	June	July
Rail freight rate index 1/ (Dec. 1984=100)										
All products	104.8	106.4	107.5	107.1	108.9	109.5	109.6 P	109.4 P	109.5 P	109.5 P
Farm products	105.6	108.4	110.4	110.6	111.6	112.8	112.4 P	111.7 P	111.8 P	113.1 P
Grain	105.4	108.7	110.1	109.7	111.0	112.5	112.0 P	111.1 P	111.2 P	112.9 P
Food products	103.2	103.9	105.4	104.8	107.7	108.3	108.3 P	108.1 P	108.2 P	108.2 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	30.7	28.4	27.6	25.7	28.6 P	28.1 P	24.9 P	20.8 P	24.5 P	25.5 P
Barge shipments (mil. ton) 3/	3.2	3.3	3.8	5.0	2.0	3.1	4.0	3.7	3.6	4.4
Fresh fruit & vegetable shipments 4/ 5/										
Piggy back (mil. cwt)	28.0	26.3	22.1	1.9	1.3	1.2	1.1	1.6	2.2	2.0
Rail (1,000 cwt)	31.6	31.0	27.5	1.7	1.7	1.8	1.4	2.6	3.1	1.9
Truck (1,000 cwt)	569.4	567.5	497.7	43.2	35.2	40.5	42.5	48.0	45.7	45.9
Cost of operating trucks hauling produce 4/										
Fleet operation (cts./mile)	118.4	123.4	130.5	126.7	130.5	128.5	128.1	127.6	124.6	124.7

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Shipments on Illinois & Mississippi waterways, U.S. Corps of Engineers. 4/ Agricultural Marketing Service, USDA. 5/ Preliminary data for 1990 & 1991. P = preliminary.

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Indicators of Farm Productivity

Table 37.—Indexes of Farm Production, Input Use & Productivity 1/

	1982	1983	1984	1985	1986	1987	1988	1989	1990 2/	1991 2/
						1977=100				
Farm output	116	96	112	118	111	110	102	114	117	120
All livestock products 3/	107	109	107	110	110	113	116	116	117	119
Meat animals	101	104	101	102	100	102	105	104	101	104
Dairy products	110	114	110	117	116	116	118	117	120	120
Poultry & eggs	119	120	123	126	133	144	148	153	165	168
All crops 4/	117	88	111	116	106	108	92	107	113	114
Feed grains	122	67	116	134	123	106	73	106	112	—
Hay & forage	109	100	107	106	106	102	89	101	101	—
Food grains	138	117	129	121	107	107	98	107	136	—
Sugar crops	96	93	95	87	106	111	105	105	106	—
Cotton	85	55	91	94	89	103	107	86	109	—
Tobacco	104	75	90	81	83	82	72	71	84	—
Oil crops	121	81	106	117	110	106	89	106	107	—
Cropland used for crops	101	88	99	98	94	88	87	90	90	—
Crop production per acre	116	100	112	120	116	123	106	119	126	—
Farm input 5/	99	96	96	92	89	89	87	88	—	—
Farm real estate	102	101	99	97	96	95	94	93	—	—
Mechanical power & machinery	92	89	86	80	77	73	72	73	—	—
Agricultural chemicals	118	102	120	115	109	111	111	122	—	—
Feed, seed, & livestock purchases	107	103	106	102	110	117	110	119	—	—
Farm output per unit of input	117	99	117	126	124	124	117	126	—	—
Output per hour of labor										
Farm 6/	125	99	121	139	139	142	134	146	—	—
Nonfarm 7/	99	102	105	106	108	109	111	112	—	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector; Production & Efficiency Statistics, 1988, ECIFS 5-6. 2/ Preliminary indexes for 1990 based on Crop Production: 1990 Summary, released in January 1991, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

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Food Supply & Use

Table 38.—Per Capita Consumption of Major Food Commodities 1/

Commodity	1983	1984	1985	1986	1987	1988	1989	1990 2/
	Pounds							
Red meats 3/4/5	123.9	123.6	124.9	122.2	117.4	119.5	115.9	112.3
Beef	74.1	73.8	74.8	74.4	69.5	68.6	65.4	64.0
Veal	1.3	1.5	1.5	1.8	1.3	1.1	1.0	0.9
Lamb & mutton	1.1	1.1	1.1	1.0	1.0	1.0	1.1	1.1
Pork	47.4	47.2	47.7	45.2	45.6	48.8	48.4	46.3
Poultry 3/4/5	45.8	47.2	49.4	51.3	55.5	57.4	60.8	63.8
Chicken	37.0	38.2	39.9	40.7	43.4	44.7	47.3	49.4
Turkey	8.9	9.0	9.6	10.6	12.1	12.6	13.5	14.5
Fish & shellfish 4/	13.3	14.1	15.0	15.4	16.1	15.2	15.6	15.4
Eggs 5/	33.0	33.0	32.4	32.2	32.2	31.2	29.9	29.6
Dairy products								
Cheese (excluding cottage) 3/6/	20.6	21.5	22.5	23.1	24.1	23.7	23.9	24.7
American	11.6	11.9	12.2	12.1	12.4	11.5	11.1	11.1
Italian	5.3	5.8	6.5	7.0	7.6	8.1	8.5	9.1
Other cheese 7/	3.7	3.9	3.7	4.0	4.1	4.1	4.3	4.4
Cottage cheese	4.1	4.1	4.1	4.1	3.9	3.9	3.6	3.4
Beverage milks 3/	226.5	227.3	229.7	228.6	226.5	222.3	224.3	221.5
Fluid whole milk 8/	130.3	126.9	123.4	116.5	111.9	105.7	97.6	90.3
Fluid lowfat milk 9/	85.6	88.9	93.7	98.7	100.6	100.5	106.5	108.3
Fluid skim milk	10.8	11.6	12.6	13.5	14.0	16.1	20.2	22.9
Fluid cream products 10/	5.8	6.2	6.7	7.1	7.1	7.1	7.3	7.1
Yogurt (excluding frozen)	3.3	3.7	4.1	4.4	4.4	4.7	4.3	4.1
Ice cream	18.1	18.2	18.1	18.4	18.4	17.3	16.1	15.7
Ice milk	6.9	7.0	6.9	7.2	7.4	8.0	8.4	8.7
All dairy products, milk equivalent, milkfat basis 11/	574.2	583.3	595.1	592.8	602.6	584.5	586.5	571.8
Fats & oils								
Butter & margarine	15.3	15.3	15.7	16.0	15.2	14.8	14.6	15.3
Shortening	18.5	21.3	22.9	22.1	21.4	21.5	21.5	22.3
Lard & edible tallow (direct use)	4.2	3.8	3.7	3.5	2.8	2.6	2.7	3.0
Salad & cooking oils	23.6	19.9	23.5	24.2	25.4	25.8	23.9	24.2
Fresh fruits	93.0	91.7	89.3	95.8	101.2	99.1	99.7	92.2
Canned fruit 12/	12.8	12.3	12.7	12.9	13.6	13.2	13.4	13.5
Dried fruit	2.4	2.4	2.7	2.7	2.6	2.9	3.1	3.1
Frozen fruit	2.9	3.0	3.3	3.6	3.9	3.8	4.6	4.3
Frozen citrus juices 13/	41.7	35.8	40.5	43.3	40.2	40.1	34.3	27.2
Vegetables 14/								
Fresh	82.5	89.6	90.5	90.9	95.4	98.7	101.0	95.2
Canning	79.5	90.7	87.5	87.7	87.1	83.1	90.5	92.7
Freezing	14.4	17.4	17.0	15.8	16.8	17.9	16.9	18.0
Potatoes, all	118.1	122.1	122.4	125.7	125.9	123.2	126.2	126.8
Sweetpotatoes	4.8	5.0	5.4	4.4	4.5	4.1	4.1	4.7
Peanuts (shelled)	5.9	6.1	6.3	6.4	6.4	6.9	7.0	6.2
Tree nuts (shelled)	2.3	2.4	2.4	2.3	2.2	2.3	2.3	2.5
Flour & cereal products 15/	149.0	150.6	158.0	163.9	173.4	172.9	175.0	184.8
Wheat flour	117.7	119.2	124.7	125.7	129.9	130.0	129.2	137.8
Rice (milled basis)	9.8	8.8	9.1	11.7	13.9	14.4	15.6	16.8
Caloric sweeteners 16/	124.3	127.0	130.0	129.1	132.8	133.2	134.3	137.5
Coffee (green bean equiv.)	10.1	10.2	10.5	10.5	10.2	9.8	10.3	10.2
Cocoa (chocolate liquor equiv.)	3.2	3.4	3.7	3.8	3.9	3.8	3.9	4.2

1/ In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, & ending stocks. Calendar-year data except fresh citrus fruits, peanuts, tree nuts, & rice, which are on crop-year basis. 2/ Preliminary. 3/ Total may not add due to rounding. 4/ Boneless, trimmed weight. 5/ Excludes shipments to the U.S. territories. 6/ Natural equivalent of cheese & cheese products. Total product weight is greater than natural equivalent because processed cheese & cheese food are made from natural cheese & other dairy products. Includes miscellaneous cheese not shown separately. 7/ Includes Swiss, Brick, Munster, cream, Neufchatel, Blue, Gorgonzola, Edam, & Gouda. 8/ Plain & flavored. 9/ Plain & flavored & buttermilk. 10/ Heavy cream, light cream, half & half, & sour cream & dip. 11/ Includes condensed & evaporated milk & dry milk products. 12/ Excludes pineapple & berries. 13/ Single strength equivalent. 14/ Farm weight. 15/ Includes rye products & barley products. Excludes quantities used in alcoholic beverages & fuel. 16/ Includes edible syrups & honey.

Information contact: Judy Jones Putnam (202) 219-0870.

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